



*Belen to Santa Fe Commuter Rail Project
Overview and Status of Project Elements
Revised January 15, 2006*



New Mexico Rail Runner Express Locomotive

Belen to Santa Fe Commuter Rail Project Overview and Status of Project Elements

Overview:

In August of 2003 Governor Bill Richardson announced that his administration was going to pursue the implementation of commuter rail between Belen and Santa Fe. To kick off this effort the Governor provided the New Mexico Department of Transportation (NMDOT) and the MRCOG with grants of \$1 million to begin the implementation. In September of that same year the New Mexico State Legislature convened in special session and passed House Bill 15, now referred to as Governor Richardson's Investment Partnership (GRIP); a \$1.6 billion transportation improvement package. One of the projects in this bill, Section 27, A(2) was the implementation of commuter rail between Belen and Santa Fe. It is the only non-roadway capital project in the entire bill.

Responding to this legislative and executive initiative the MRCOG and the NMDOT developed a strategy for implementing commuter rail in this corridor. The project has been divided into two phases. Phase I, which is scheduled to begin service in the Spring of 2006, includes the portion of the corridor between Belen and Bernalillo. Phase II covers the remaining portion between Bernalillo and Santa Fe. Service is not expected to start on this segment until the end of 2008. The schedule is longer for this piece because a new track alignment will need to be constructed for the northern portion of the line and the NMDOT and MRCOG are pursuing Federal funds to help defray Phase II capital costs.

The purpose of this document is to provide an overview of the status of both phases of this project. This document was originally produced in September of 2004 to provide interested parties with information on the status of the various elements of the Commuter Rail project from Belen to Santa Fe. Since its original production it has been updated on a quarterly basis to reflect the most recent information. It has also been posted on the New Mexico Rail Runner web site continuously since September of 2004. Since Phase I is nearer term, and most of the current activity is focused on this phase, most of the detail provided is related to Phase I. The information contained in this report has been drawn from a large number of disparate sources. There is a significant amount of detail in many of these sources that is not reproduced in this document, but is available should additional questions arise.

Commuter Rail Defined

There are many different types of rail passenger transport in service in the U.S. today. Amtrak provides long distance interstate passenger service in many corridors. Large urban areas like Los Angeles have light rail and commuter rail. Some cities utilize trolleys or cable cars. Most commuter rail operations in the U.S. are oriented toward longer distance work trips that are 15 – 100 miles in length. In order to provide travel times that are reasonably competitive with the auto, stations are generally spaced between

five and eight miles apart. They typically serve bedroom communities, suburban and rural areas at the origin end, and an urban center or large employment clusters on the destination end. In the western U.S. most commuter rail services utilize diesel powered locomotives to pull commuter rail passenger cars. Figure 1 depicts a typical commuter rail train set.

Figure 1. Commuter Rail Train Set



Commuter rail stations on the origin end are often park and ride lots with a boarding platform and drop off accommodations for autos and transit. An illustration of this type of station is shown in Figure 2.

Figure 2. Commuter Rail Station



At the destination end which is often the central city or downtown core of an urban area, stations are typically more elaborate because they serve multiple lines and multiple uses. Union station in Downtown Dallas for example serves Amtrak, the Trinity Rail Express (which is the Dallas/Fort Worth Commuter Line) and the Dallas Area Rapid Transit (DART) light rail lines.

In the western U.S. it is common for commuter rail trains to utilize the same tracks as freight trains, although several commuter rail operations such as Caltrain, and Utah Transit Authority either bought freight lines to utilize for passenger service or bought rights of way within a freight rail corridor to construct track for passenger rail service.

Commuter rail service is often confused with light rail service. Light rail operations typically serve much shorter distance trips (5-10 miles) and may have stations or stops every half mile to a mile. Light rail trains do not run on tracks carrying freight trains, and often run on tracks that run parallel to, or in the middle of general purpose traffic lanes. Light rail systems are almost exclusively run by electric power supplied by overhead wires or an electrified third rail. Light rail systems are also a lot more expensive to implement, partially due to the electrical subsystems that are required to supply power to the line. Light rail systems cost on the order of \$25-30 million a mile to implement. In most cases light rail systems serve more intense suburban and urban developments.

Regional Context

The Belen - Santa Fe Corridor is the center of population and the economic, financial, governmental, and educational heart of the State of New Mexico. This corridor is critical for commuters, freight, tourism, business and government for nearly one million residents and two million visitors every year. The corridor has many unique features, including connections between the Albuquerque International Airport and the State Capitol in Santa Fe; Seven Native American Pueblos are located within the corridor.

Albuquerque is part of an urbanized region stretching across four counties. As the commercial, financial and educational center of the state, the population of the region has almost doubled in the past 30 years to more than 740,000 (2002 estimate) and is predicted to increase another 40 percent, to about 1,075,000, by 2025.

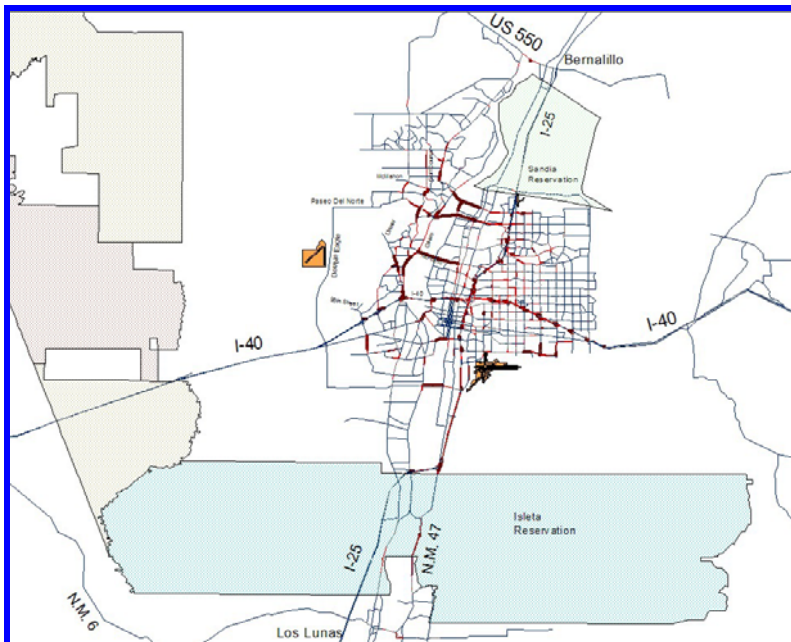
In the Santa Fe metropolitan area the population has more than doubled in the same 30-year period to 142,500 and it is expected to increase another 60% to 228,000 by 2025. While Santa Fe is a major regional employment center with over 79,000 jobs, (about 21,000 of which are government jobs) the lack of affordable housing forces much of the workforce to live outside the city. The median home price in Santa Fe was \$270,475 in 2003, nearly \$100,000 higher than the national median. **By 2005 the median price for a home in Santa Fe increased to \$470,000.** At the same time the median household income is less than the national average. This has created a significant commuter population traveling the corridor on a daily basis. Santa Fe is also a well-known tourist destination attracting between 1 and 2 million visitors each year. It is a major factor in the economy of the state.

In 2002 New Mexico's population was estimated at 1,855,000. Total employment for this same year was estimated at 774,000. The Albuquerque–Santa Fe corridor with 883,000 people is nearly half of the state's entire population. With over 443,000 jobs in the corridor, Albuquerque and Santa Fe together contain nearly 60% of New Mexico's employment. By 2025, population in the corridor will grow by nearly 50% to more than 1,300,000 and under current plans, will still have but one interstate highway as the only continuous roadway connecting the two metropolitan areas.

Transportation Issues in the Middle Rio Grande Valley

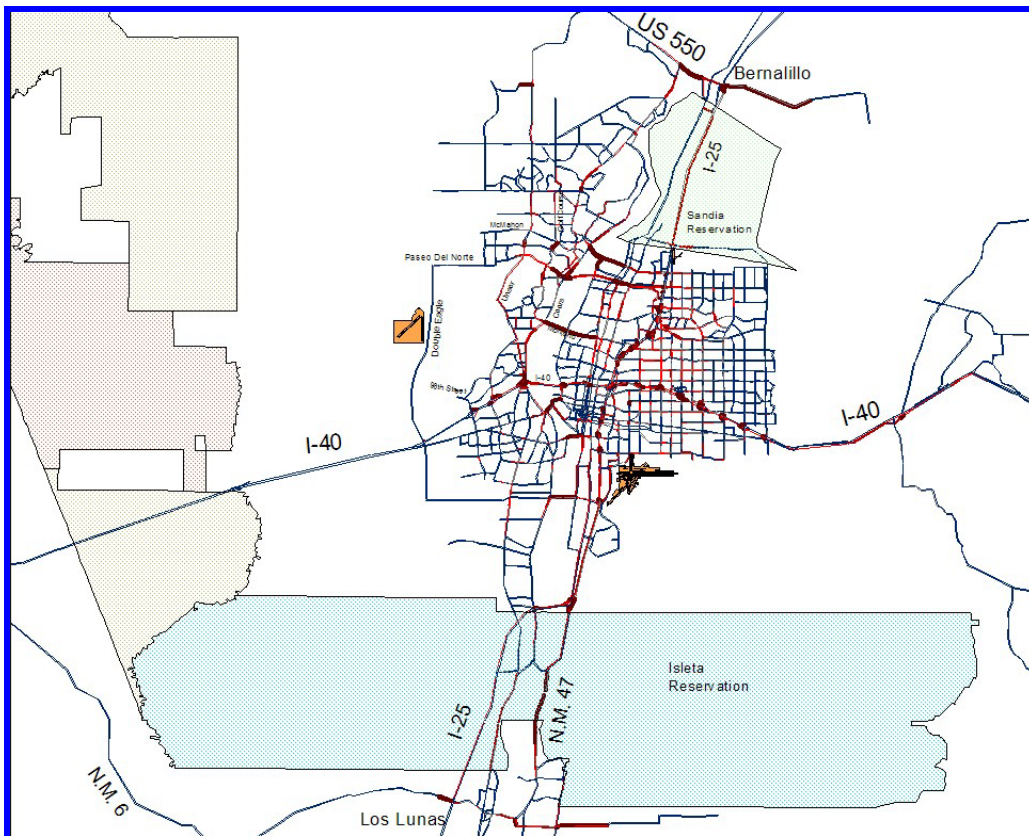
The MRCOG is the federally designated Metropolitan Planning Organization (MPO) for Bernalillo County and the southern portion of Sandoval County which includes the communities of Rio Rancho, Bernalillo, Algodones and Placitas. In addition the MRCOG is the Regional Planning Organization (RPO) for Valencia and Torrance Counties. Acting in the capacity of the MPO the MRCOG is required to produce (every three years) a Metropolitan Transportation Plan (MTP), which contains a prioritization (in five year increments) of all transportation projects over a minimum of the next 20 years. This Plan also has to be financially constrained, which means transportation revenues are projected for the time frame covered by the plan, and the sum of transportation capital projects and maintenance activities, cannot exceed expected revenues. In order to develop this Plan the MRCOG conducts a great deal of analysis to assess the performance of the transportation system at different time intervals. This is done utilizing a series of models that forecast future transportation demand based on the distribution of growth and the anticipated transportation supply. Figure 3. below shows an example of this kind of analysis.

Figure 3. Volume to Capacity Ratios on the MTP Year 2002 Roadway Network



Volume to capacity ratios are a measure of the peak hour auto volumes relative to the hourly capacity of the roadway. Roadways that are in blue have lower volume to capacity ratios and are therefore not congested during the peak hour. Roadways that are red and dark red, are roadways which were at, or over capacity in the peak hour in the Year 2002. The Year 2002 served as a base year for the current version of the MTP. The figure illustrates that the river crossings and several Westside arterials are congested as are portions of the Interstate system. The section of I-25 between Broadway (N.M. 47) and Gibson Blvd. is also experiencing some peak hour congestion. The next figure shows this same information for the Year 2010.

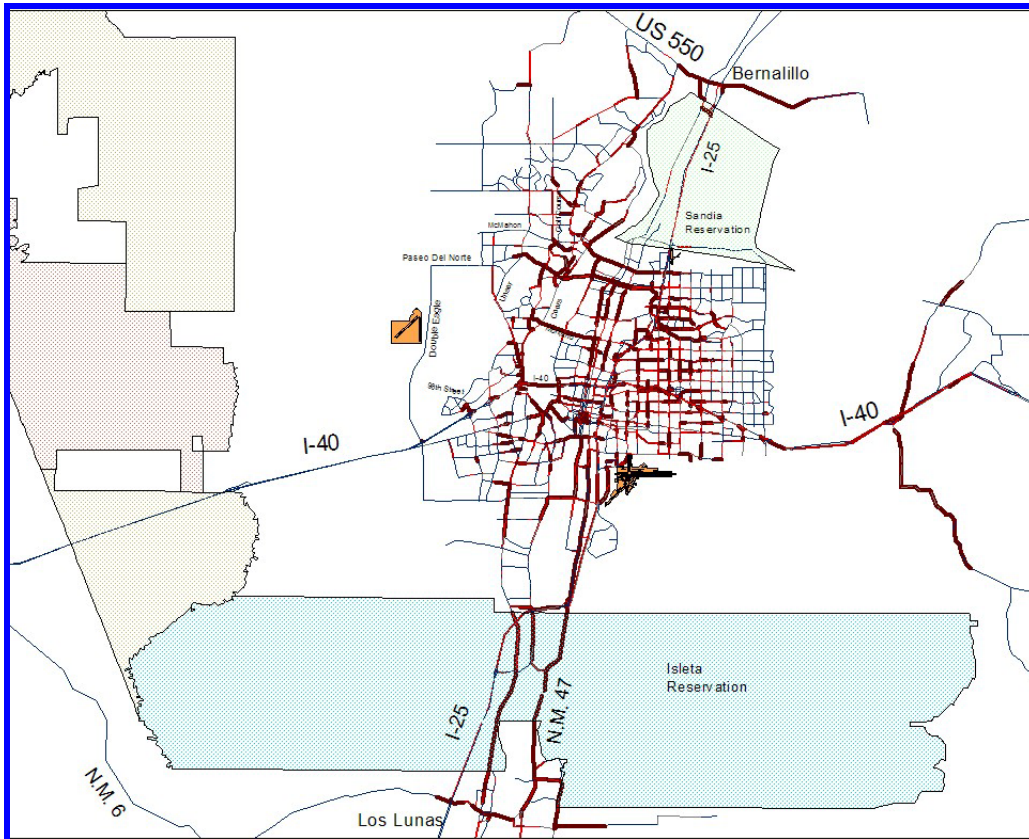
Figure 4. Volume to Capacity Ratios on the MTP Year 2010 Roadway Network



One can see in Figure 4, that despite additional roadway construction projects between now and the Year 2010, there are still many places in the region where roadways are anticipated to be congested. This is particularly true of the river crossings and on the Interstate system. I-25 is projected to be fairly congested from the N.M. 47 Interchange to Gibson, and portions of I-25 and N.M. 47 (the two key facilities that transport traffic between Bernalillo County and Valencia County) are anticipated to experience peak hour congestion through portions of the Isleta Reservation. On the northern side of Albuquerque, I-25 (the only major roadway facility connecting Bernalillo, Northern Rio Rancho and Placitas to the urban area) is anticipated to experience peak hour congestion

as are portions of U.S. 550 and N.M. 165 (the state road to Placitas). Figure 3 shows this same information for the Year 2025.

Figure 5. Volume to Capacity Ratios on the MTP Year 2025 Roadway Network



By the Year 2025 peak hour congestion in this region is anticipated to be a great deal worse than it is today, as indicated by Figure 5. All routes connecting Valencia County to the Albuquerque urban area are anticipated to be severely congested for long distances. Even the section between Rio Bravo and Gibson is congested despite the addition of lanes on I-25 between Rio Bravo and Gibson. On the north side (which assumes an additional lane on I-25 between Tramway and U.S. 550) there is still moderate congestion on I-25 but more severe congestion on U.S. 550 and at the U.S. 550/I-25 Interchange. It is also worth noting the Interstate and arterials adjacent to most of the activity centers in the urban area (Downtown, Uptown, Journal Center, Albuquerque International Airport, UNM/TVI and Intel) are anticipated to be congested. Keep in mind that the roadway network for the Year 2025 includes and assumes many new and capacity enhanced facilities over the base year. In fact, the capital costs of these improvements on the roadway side (in year 2002 dollars), plus the maintenance cost (for the roadway system between 2002 and 2025) is estimated at \$1.9 billion in the MTP.

These figures illustrate that despite extensive expenditures on new roadway capacity, mobility in the region is expected to decline significantly over time. To translate some of this information into more understandable terms, the table below illustrates peak hour

travel times between Belen and Albuquerque and Bernalillo and Albuquerque for 2004 and the Year 2025.

Table 1. Auto Travel Times

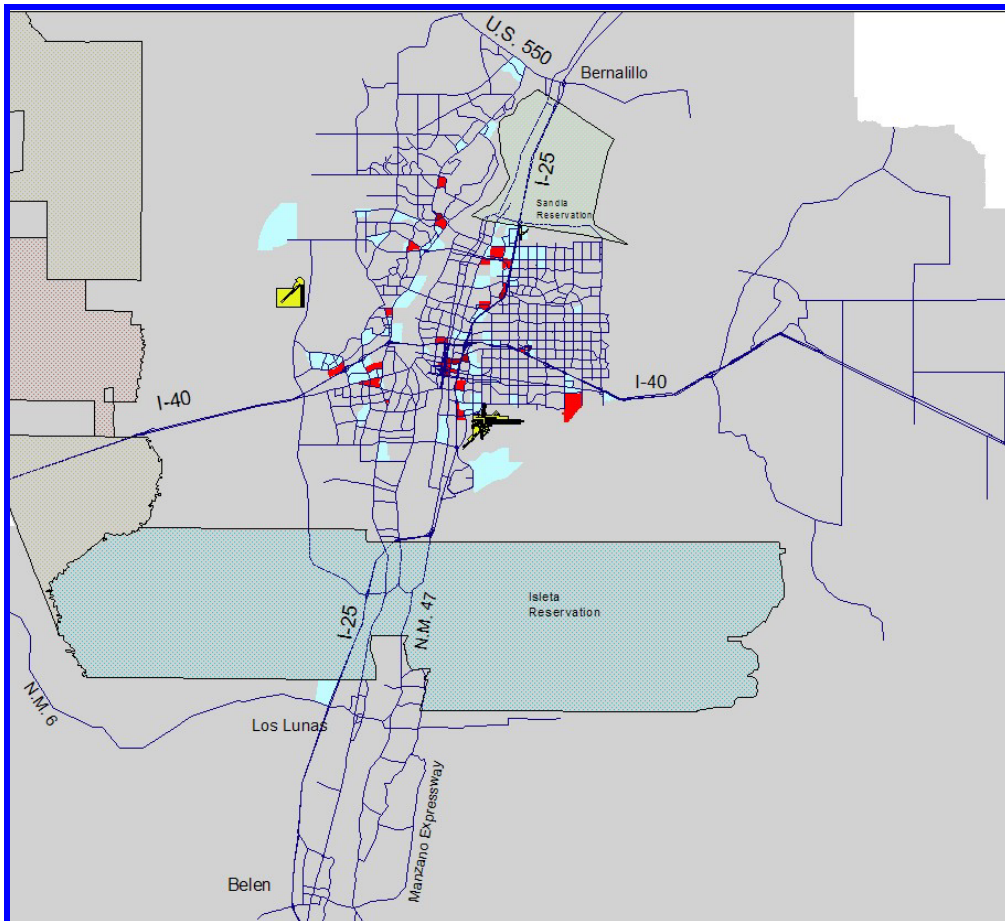
Downtown Albuquerque to Downtown Belen
Distance 34 Miles

Peak Hour	Year 2004	Year 2025	Difference
Travel Time In Minutes	45	82	37
Avg. Speed	46 mph	25 mph	21 mph

Downtown Albuquerque to Downtown Bernalillo
Distance 20 Miles

Peak Hour	2004	2025	Difference
Travel Time In Minutes	25	35	10
Avg. Speed	48 mph	34 mph	14 mph

Figure 6. Growth in Jobs Expressed in Jobs Per Acre 2002-2025



There are many factors that explain the degeneration of the region's roadway performance over time. They include growth and the distribution of growth, the costs of and the resources available to provide the necessary transportation services and infrastructure, the existence of significant environmental, physical or political obstacles in many of the critical transportation corridors, and the phenomena of generated traffic.

Figures 6 and 7 illustrate two of these factors more clearly. Figure 6 shows job growth expressed in Jobs per acre between the year 2002 and 2025. Zones colored red are anticipated to experience the most growth in jobs, followed by blue and then grey. Job growth over the next 20 years is expected to occur to a large degree within existing employment centers (Downtown, UNM, Journal Center, Uptown, the Kirtland Complex and Intel).

Figure 7. Growth in Population Expressed in Persons Per Acre 2002-2025

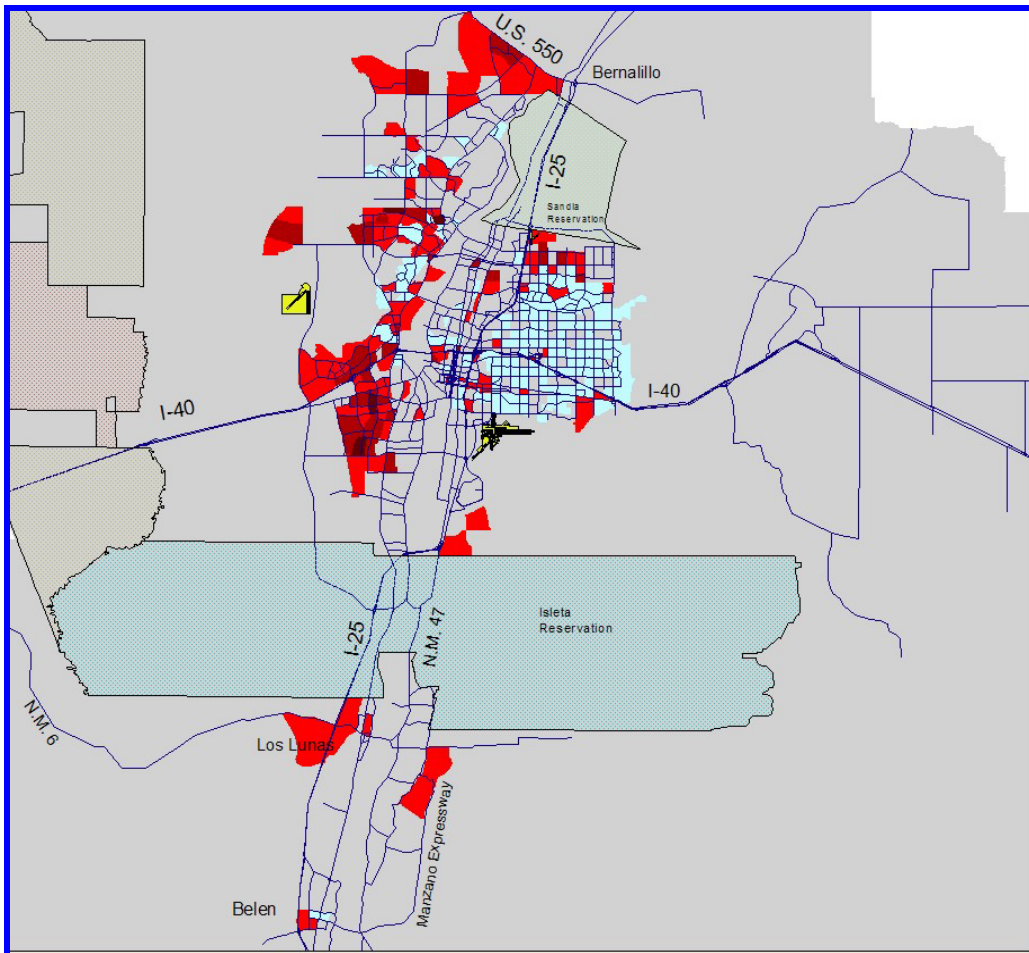


Figure 7 shows the increases in population densities between the year 2002 and 2025. While most of the new population growth expected to occur in this area over the next 20 years is located west of the Rio Grande in the northwest and southwest regions of Albuquerque, large absolute increases in population are anticipated for Valencia County (particularly in the Los Lunas and Belen areas) and in the Northern Rio Rancho,

Bernalillo, Placitas area. Table 2. illustrates these increases by county for the period 1970-2025.

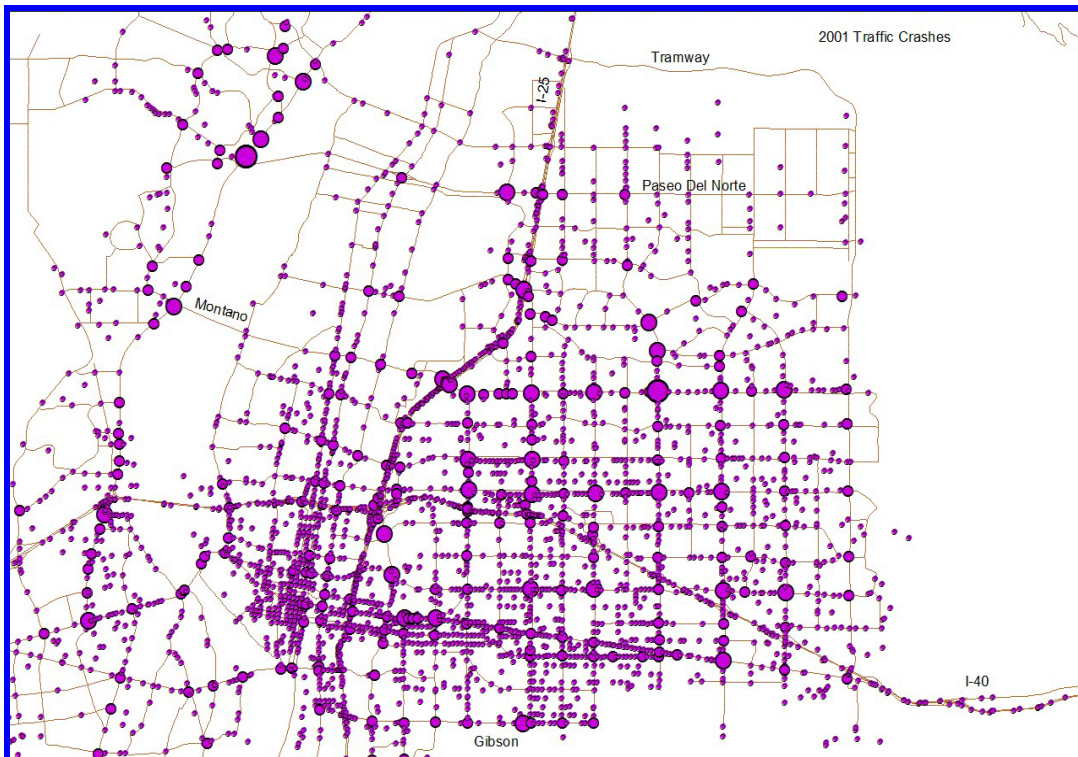
Table 2. Population Increases by County 1970-2025

Population	Sandoval	Valencia	Bernalillo	Total
1970	17,492	20,451	315,774	353,717
2000	89,908	66,152	556,678	712,738
2025	179,998	118,593	729,750	1,028,341
% 2000-2025	100.0%	79.0%	31.0%	44%

The north south corridor (Belen to Bernalillo) is one that is particularly vulnerable because the growing population centers of Valencia County, Bernalillo, Placitas and Northern Rio Rancho are separated from the Urban area by the Isleta and Sandia Indian Reservations. The existing roadway options through these areas are limited and the possibility of adding new roadways or additional capacity through the reservations is even more limited still.

The modeling analysis done for the MTP assumes that the roadway system performs in its optimum condition. However there are many recurring phenomena that impact the performance of the roadway system. Figure 8 below shows traffic crashes in the central Albuquerque region.

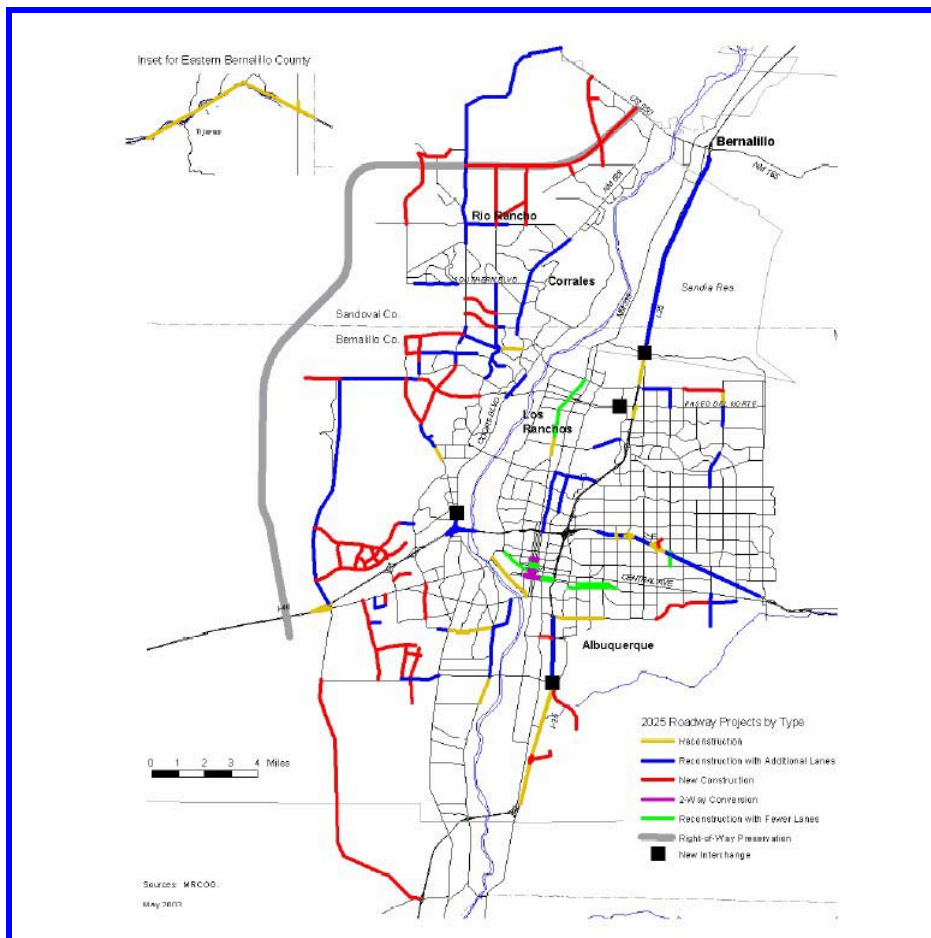
Figure 8. Year 2001 Traffic Crashes in the Albuquerque Area



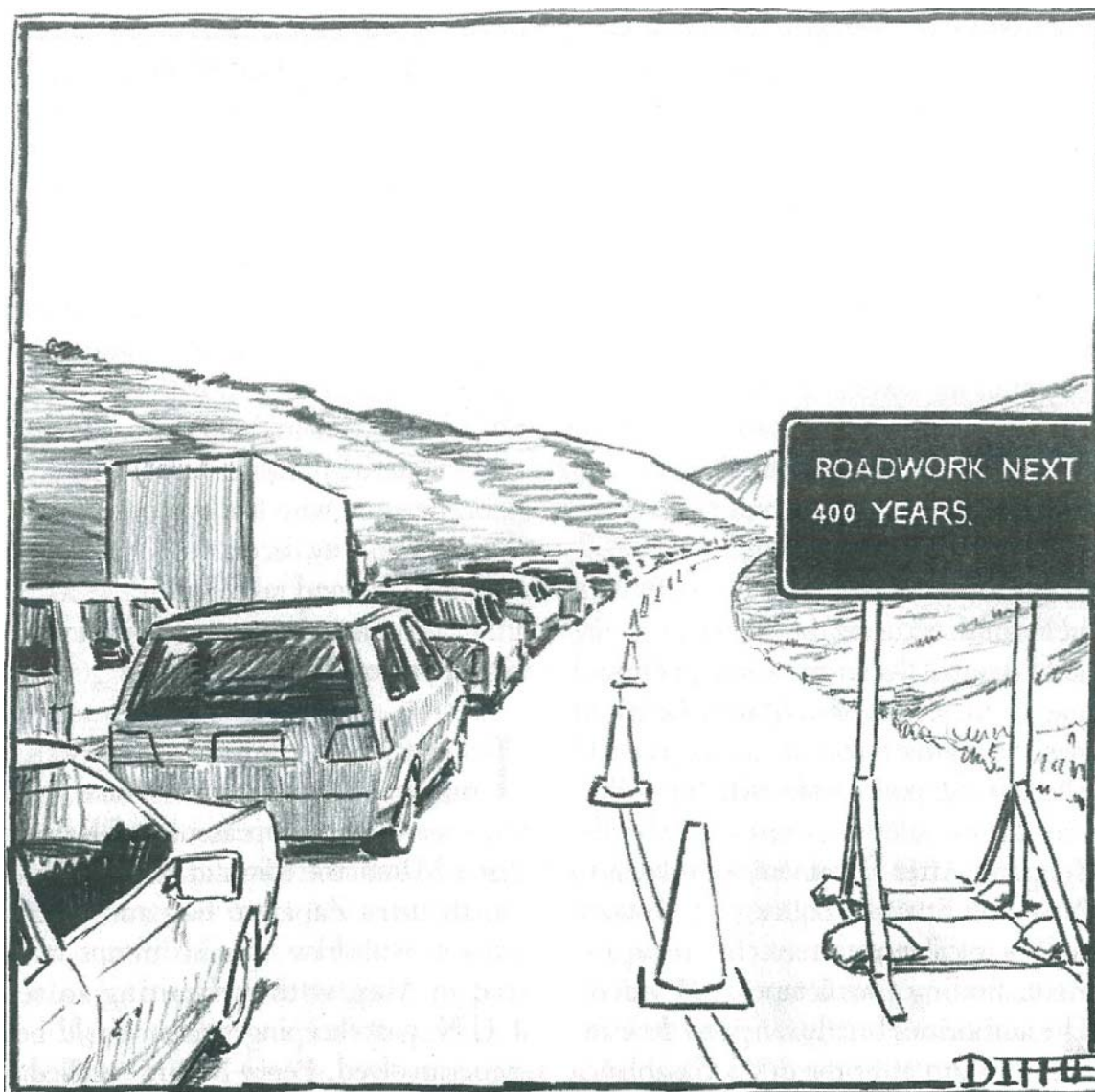
Dots that are larger, indicate that more crashes have occurred at the location. In the year 2001 there were 1,254 traffic crashes on I-25 between Gibson Blvd. and Tramway Blvd. These are traffic crashes reported through the State Accident Reporting System, so they do not include disabled vehicles on the side of the road, or minor incidents that are not reported. Still this translates into about 3.5 crashes per day. This portion of I-25 serves many strategic destinations including Downtown, UNM/TVI, the Kirtland Complex and the Journal Center. 2003 Average Weekday Traffic Volumes on this section range from 57,800 to 183,500. Traffic crashes on this portion of the Interstate can be extremely disruptive, especially those that occur in the peak periods. While crashes per million vehicle miles of travel are expected to decrease over time, as portions of the Interstate are reconstructed, increasing traffic volumes (and therefore vehicle miles of travel) will result in a steady increase in the total number of traffic crashes on I-25 over time. The end result will be more peak commutes disrupted by traffic crashes.

Roadway construction is another recurring activity that can limit the optimum capacity of the roadway system. Figure 9 illustrates all roadway related projects (of regional significance) included in the MTP. These projects are expected to occur between the year 2002 and the year 2025.

Figure 9. 2002-2025 Roadway Projects



The Figure illustrates that a great deal of I-25 between Broadway (N.M. 47) on the south and Bernalillo (U.S. 550) is anticipated to be reconstructed over the next 20 years. While most roadway construction projects are managed to minimize the impact on the traveling public, all projects will affect roadway capacity to some degree; either through speed reductions, or lane reductions and in some cases both. The projects on I-25 and I-40 are not planned to occur all at the same time, leading some to perceive that the Interstate system is in a perpetual state of construction.



While this is not entirely the case, it can be said that roadway construction is another factor that needs to be considered when assessing the performance of the roadway system.

It is not easy to communicate the importance of pursuing the implementation of modes that offer alternatives to the roadway system without understanding the short and long term implications of a single mode transportation system. The Albuquerque Urban area is

not unique. It has simply reached a point in its history where road building cannot keep pace with growth and the distribution of growth in this constrained environment. An article in USA Today elaborates on the Texas Transportation Institute's annual report on the state of congestion in this country's urban areas:

Sprawl produces crawl: bigger cities, bigger traffic jams

USA Today, Sept. 7, 2004

WASHINGTON (AP) - Los Angeles for years has had the nation's worst traffic jams, but these days even the streets and highways in small and medium cities from Brownsville, Texas, to Anchorage, to Honolulu, Hawaii, are giving rush-hour drivers fits. Snarled traffic is costing travelers in the 85 biggest U.S. cities a whopping 3.5 billion hours a year, up from 700 million two decades ago. The problem worsened over the past two decades in small, medium and large cities, according to the Texas Transportation Institute's annual Urban Mobility Report released Tuesday. The institute, part of Texas A&M University, looked at data from 1982 to 2002.

Over that period, the study recorded the greatest leap in congestion in Dallas, from 13 hours annually in 1982 for the average peak-period traveler to 61 hours annually in 2002, and in Riverside, Calif., from nine hours annually per rush-hour traveler in 1982 to 57 hours on average in 2002. The average urban traveler was stuck in road traffic 46 hours a year in 2002, a 187% increase over the 16 hours lost in 1982. Even more startling is the decline of free-flowing traffic during rush hour. In 1982, 30% of urban highways and arteries were congested. Twenty years later, drivers were delayed on 67% of those roads. Alan Pisarski, author of "Commuting in America," said that escaping to a small city no longer means escaping from traffic. "You're beginning to see problems in places that you didn't know had problems, places you've never heard of," Pisarski said. Even in cities with the least bad congestion - Anchorage, and Brownsville, Texas - drivers lost five hours a year to traffic. In medium-sized cities such as Honolulu it was 18 hours. What's alarming is how congestion outpaces a city's ability to handle it. In 54 urban areas, traffic snarls increased 30% faster than roads could be built to alleviate them. Tim Lomax, the report's author, said the news was not all bad. Roads were built fast enough to catch up to spreading populations in some cities, such as Anchorage, New Orleans, Pittsburgh, Tampa, and Charleston, S.C. **"They've been getting worse, but they've been getting worse slower than everyone else," Lomax said. "In the bizarre world of transportation mobility, that's progress."** The report notes that major highway improvements can take 10 years to 15 years to complete. Traffic in some cities has actually gotten better - but that's because their economies have done poorly. "In a lot of the places in the past we've seen success in cities suffering job declines - Pittsburgh, Buffalo, Cleveland," Pisarski said. "Unemployment is a great solution." The biggest time-saver, according to the report, is public transit, which shaves 32% off the time drivers spend sitting bumper-to-bumper. "If public transportation service was discontinued and the riders traveled in private vehicles, the 85 urban areas would have suffered an additional 1.1 billion hours of delay in 2002," the report said. Lomax said the benefits to transit systems are in cities that are already too congested to handle more vehicles. "Typically you're in a situation where you can't handle any more transit on the roads, so public transit

becomes the way you support economic development," he said. The report is based on data from the states and the Transportation Department.

Transportation Issues in the Albuquerque to Santa Fe Corridor

This corridor has many of the same characteristics as the north south corridor between Belen and Bernalillo. The Corridor is currently served by Interstate 25, a four-lane interstate highway. **It is the only continuous roadway connecting Albuquerque and Santa Fe that directly serves both population centers.** It traverses the Pueblos of Sandia, Santa Ana, San Felipe and Santa Domingo, so expanding the capacity of the facility, or pursuing the construction of another roadway in the corridor would involve some significant challenges.

The transportation issues in this corridor are best understood in terms of its three logical sections: Interstate 25 and the two metropolitan areas at either end.

The portion of I-25 between Bernalillo (U.S. 550) and Cerrillos Road in Santa Fe is primarily rural Interstate. Traffic volumes on this section are in the order of 30,000 vehicles per day. The highest directional peak hour volumes recorded in this section by the MRCOG Traffic Surveillance Program are about 1,850 vehicles in the northbound direction during the a.m. peak hour and about 2,150 vehicles in the southbound direction during the p.m. peak hour. Directionally the Interstate can handle up to 3,000 vehicles in one hour before significant decreases in speed can be expected. This is not to imply that the current condition is desirable for many who have to make this drive. Spending an hour driving at speeds in the range of 70 to 75 mph in a traffic stream that carries 2100 vehicles per hour, can be tense, tedious, and challenging but there is existing capacity on the Interstate in this section to handle the current peak hour demand, as well as peak demand for some time into the future. However, because it is the **only transportation facility** in this corridor, it is particularly vulnerable to traffic crashes, construction, weather and other incidents that may cause even a slight disruption to the normal carrying capacity. Serious traffic crashes, often result in the closure of this facility or a reduction in the number of lanes available, marginalizing a connection that serves a large portion of the State's population and jobs. A recent example of this kind of exposure occurred on September 8, 2004, when a cement truck overturned on I-25 between the two Interchanges in Bernalillo. This crash closed northbound I-25 for over an hour. Northbound traffic backed up over 7 miles, and traffic had to be re-routed to N.M. 313 through the town of Bernalillo.

The two urban areas at either end of this corridor provide a different set of transportation challenges. The previous section provided a great deal of information related to transportation issues in and around Albuquerque. Many of these same issues are present in Santa Fe. The core area of Santa Fe includes the renowned four hundred year old historic district with its many tourist hotels and retail shops; a significant concentration of state and local government office buildings, including the Capitol and the South Capitol complex; the Santa Fe Municipal Complex and Convention Center and Santa Fe County Courthouse and Government offices and large tracts of densely populated neighborhoods.

Figure 10. Year 2005 Employment Densities Central Santa Fe

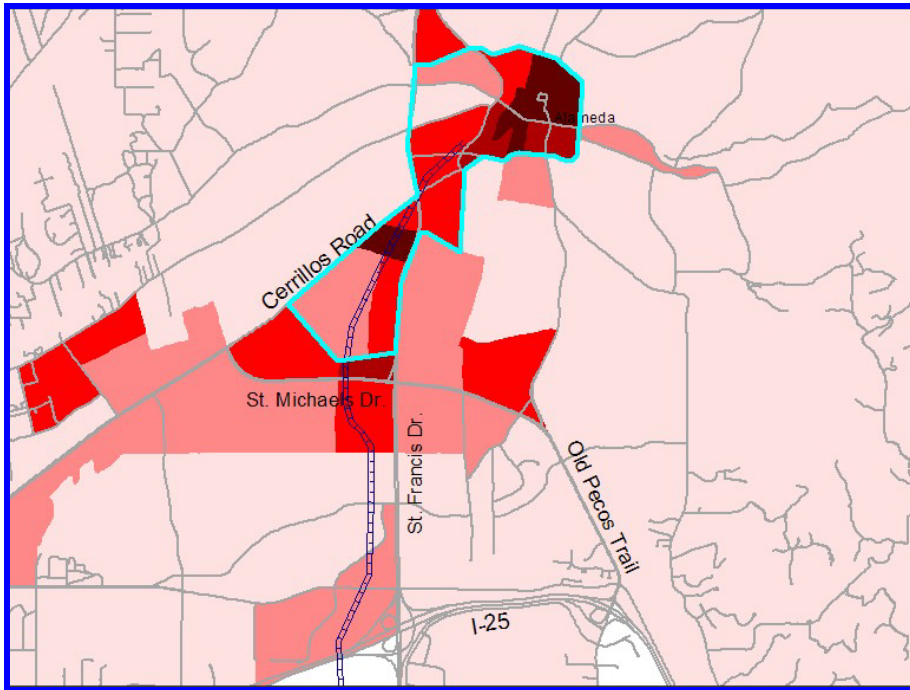


Figure 10 depicts job densities in gradients, the darker the shade of red the more job density there is in the zone.

Figure 11. 2005 Housing Densities Central Santa Fe

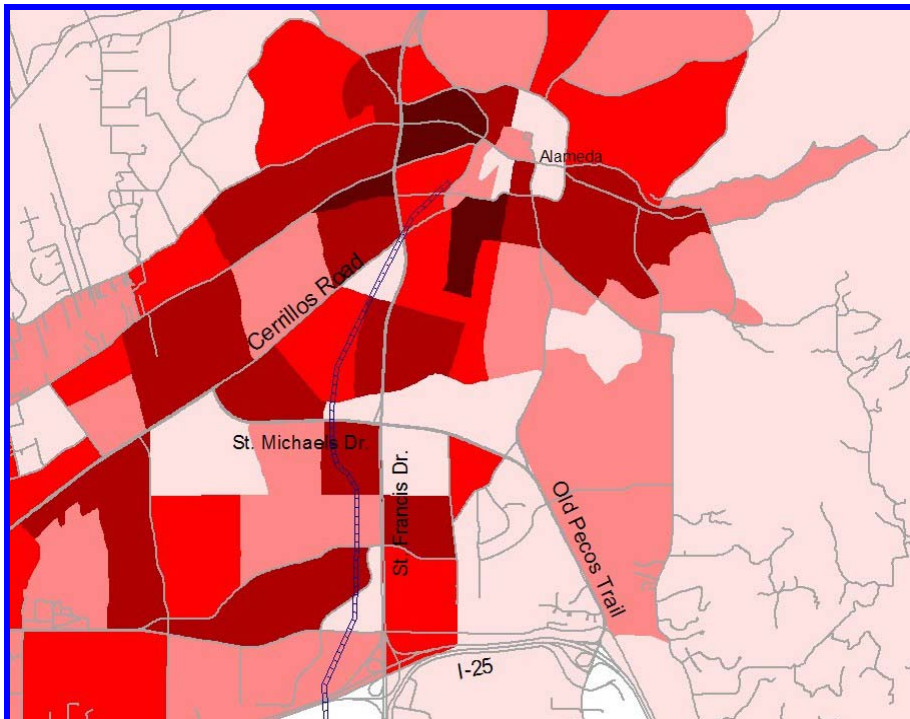
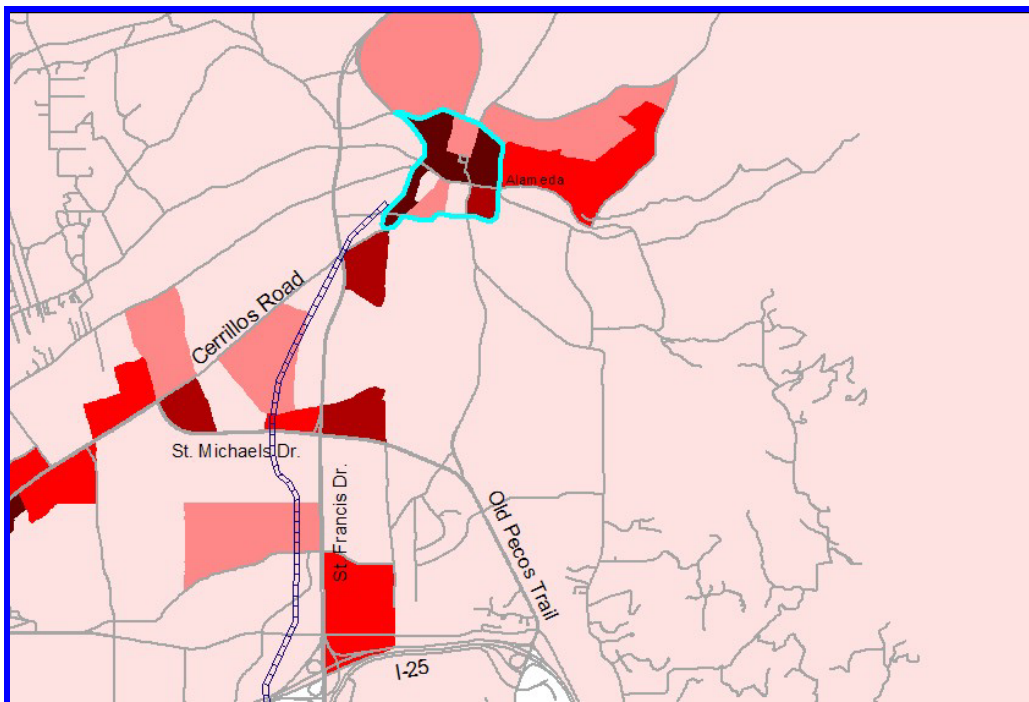


Figure 10 also shows the existing rail line (in blue hatch parallel to St. Frances Dr.), which would be utilized by the commuter rail service. While station locations have not been identified for this phase the existing station area downtown will be the terminating point for the service and it is likely that another station will be located in the vicinity of the south capital complex. The light blue line outlines an area that would be highly accessible to these two locations. This same area contains about 18,000 jobs today. This high degree of accessibility to a concentrated area of employment is a very positive situation for the commuter rail market. Many of these jobs are located within a short walk of potential stations sites. Those that are not, could be quickly accessed a shuttle system. Figure 11 illustrates the same information for housing densities. Again, the darker the shade of red the greater the housing density in the zone. The figure illustrates that the denser parts of Santa Fe are highly accessible to the rail line and potential stations. While it is difficult to spatially represent the location of tourism, and all that tourism entails, hotel room densities are one indication of activity. Hotel room densities are depicted in Figure 12.

Figure 12. Hotel Room Densities in Central Santa Fe



The largest cluster (measured by density) of hotel rooms is inside the light blue polygon. There are close to 1200 hotel rooms in this area, which is really the core of historic downtown Santa Fe. All of these rooms are within one mile of the existing Downtown Santa Fe rail station.

Traveling from the rest of Santa Fe or elsewhere (Albuquerque, Northern New Mexico) to this core area is today, means utilizing a very limited arterial system (St. Francis Drive, Cerrillos Road, Old Pecos Trail) and finding adequate parking, a scarce commodity in

downtown Santa Fe. Portions of St. Francis, Cerrillos Road and other roadways serving this core area are congested during the peak periods today.

Table 3. Average Weekday Traffic Volumes on Major Roadways in Santa Fe

TRAFFIC VOLUMES										
(Average Weekday Traffic/24-Hours)										
<u>Roadway</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Cerrillos Rd.	52,600	54,400	53,500	55,400	55,150	55,700	56,000	55,000	55,000	60,200
St. Francis Dr.	47,000	49,700	50,600	51,850	52,550	53,900	51,400	52,800	54,800	54,800
St. Michael's Dr.	39,100	36,550	37,900	38,300	38,500	39,200	40,550	40,550	40,550	40,550
Airport Rd.	30,400	30,400	31,600	31,350	35,950	36,750	37,000	37,000	37,000	30,700
Rodeo Rd.	24,750	25,300	25,800	32,500	32,500	33,600	34,600	34,600	34,600	31,700
Paseo de Peralta	26,900	27,300	27,500	27,500	27,700	27,200	27,200	27,200	27,200	27,200
Old Pecos Trail	21,100	19,900	20,200	21,700	21,100	21,200	21,800	23,400	22,700	22,750
Agua Fria	17,100	17,100	17,300	17,700	19,100	19,450	19,500	19,550	21,550	21,500
West Alameda	13,200	13,250	14,600	15,100	16,500	16,200	15,700	15,700	15,700	14,500

Source: City of Santa Fe Public Works Department

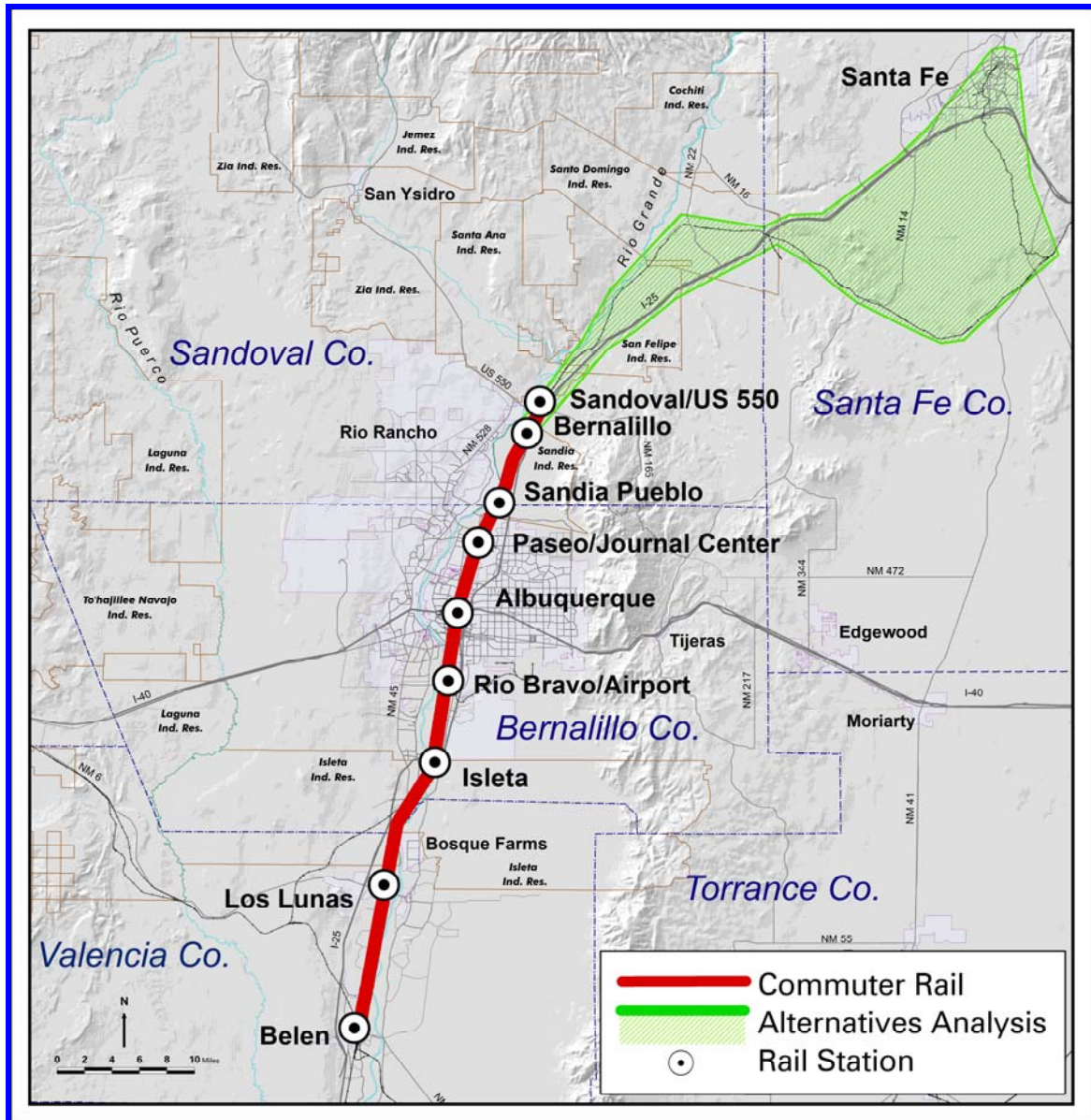
Table 3 illustrates Average Weekday Traffic Volumes (AWDT's) on several of the key arterials serving downtown Santa Fe. Cerrillos Road and St. Francis Drive are particularly notable because they are already carrying over 50,000 cars a day, and are the key facilities for accessing this part of Santa Fe. In addition many of these roadways are forecasted to get considerably worse over time, as Santa Fe continues to grow. There are no plans to expand roadway infrastructure around or into this core area over the next 20 years, primarily due to the historic and cultural nature of the area. Providing reasonable transportation alternatives to this part of Santa Fe is an issue that is integral to the future of the downtown Santa Fe employment, retail, and tourism markets. It will be very difficult for this area to remain as a vibrant employment center, tourist destination, retail and service center without any new transportation capacity over the next 20 years.

Commuter Rail and the Belen to Santa Fe Corridor

Implementing commuter rail in this corridor will not solve all of the issues mentioned above, but part of the reason for pursuing this venture is to implement a transportation mode that can address many of these issues in a very substantive way. First, the plan is to utilize the existing rail line for the vast majority of the corridor. For Phase I this means utilizing the Burlington Northern Santa Fe (BNSF) line starting just east of downtown Belen, proceeding north through downtown Los Lunas, Isleta Pueblo, South Albuquerque, and into the Alvarado Station in Downtown Albuquerque. The line then continues north through the North Valley of Albuquerque, Sandia Pueblo and into the center of Bernalillo. Phase I service is anticipated to terminate at a park and ride station located at the railroad tracks and U.S. 550. Phase II will utilize the existing line starting from Bernalillo northward through Santa Ana, San Felipe and Santa Domingo Pueblos. The existing line then crosses I-25 at the base of La Bajada Hill and proceeds east to Lamy where it transects the Santa Fe Southern Line which proceeds north into Downtown Santa Fe. The Santa Fe Southern Line includes a number of grades and horizontal curves that restrict train speeds in most cases to less than 20 mph. Therefore, if the existing tracks were utilized all the way to Santa Fe, the trip from Downtown Albuquerque to Downtown Santa Fe would take in excess of 2 hours. A commuter rail

service based on this time frame is not likely to draw much of a customer base. Therefore new or upgraded track will be needed in a portion of this corridor. Figure 13 below includes a map of both phases.

Figure 13. Commuter Rail Corridor Map



The dark green shaded area in Phase II which is bounded by I-25 on the north, the existing BNSF line to the south and the Santa Fe Southern line on the east is the area identified for alternative track alignments. Potential new track alignments are under investigation in this area that will connect the existing BNSF line with the Existing Santa Fe Southern line somewhere south of I-25. The existing Santa Fe Southern line will be utilized from I-25 into Downtown Santa Fe.

With the exception of the new track needed for a portion of Phase II, commuter rail service can be implemented on this corridor using the existing line which lies within existing rights of way. So it does not require the acquisition of new land through any of the native communities in the corridor.

In many areas of the country (Seattle, Salt Lake City, San Jose) implementing commuter rail service on an existing freight rail line was difficult due to the large volume of freight trains already utilizing the tracks. By contrast, the rail line in this corridor has an abundance of excess capacity. Amtrak runs one train a day in each direction between Lamy and Isleta Pueblo, and the BNSF typically runs three to four sprint trains (local delivery) a day between Belen and Albuquerque, and one long haul train that traverses the entire corridor. The track in this corridor is also in relatively good shape, with most of it rated for passenger service at 79 mph. While there is a portion of the track between Belen and Isleta Pueblo that will need some signal and track improvements to improve the capacity and speed of the line, overall the situation in this corridor is very favorable for the implementation of commuter rail service. Preliminary train travel times provided by BNSF indicate that a train trip between Downtown Albuquerque and Belen will take about 45 minutes. Train travel times between Bernalillo and Downtown Albuquerque are expected to take about 22 minutes. These travel times are about what it takes to drive between these points today during the peak period. As noted above, auto travel times in this corridor are anticipated to increase significantly in the future.

One of the key advantages of implementing commuter rail service in this region is the reliability of commuter rail travel times. Not only are commuter rail travel times not subject to many of the factors that can make auto times so unreliable (recurring congestion, crashes, incidents, weather) but also, commuter rail travel times can be expected to decrease overtime as additional improvements are made to the infrastructure, and technological advances improve the performance of train sets. Auto travel times are forecasted to do the opposite. Improvements to regional mobility and travel time reliability are two key criteria that are often used to assess the performance of transportation projects. Commuter rail service in this corridor can provide both, at a level the roadway system cannot hope to achieve.

When the Atchison, Topeka, and Santa Fe Railroad laid north-south tracks through the middle Rio Grande Valley in 1881, the resulting freight and passenger rail services transformed the economic fortunes of this region. Throughout New Mexico, railroads served as powerful economic engines, tying the Territory into a growing national economy and spurring the growth of communities such as Belen, Los Lunas, Albuquerque, and Bernalillo along the route. Many of us cross the track every day without realizing the tremendous potential the existing rail line still holds for economic development. The track represents an underutilized, valuable asset in the heart of many of these communities that can once again stimulate the local economy. While the era of heavy freight rail expansion is past, passenger rail is now enjoying a renaissance across the United States and New Mexico is perfectly situated to join regions such as Denver, Dallas, and Salt Lake City in using passenger rail service to drive local economic

development. Efficient transportation is vital to any healthy economy. Connecting employers with employees is a key component of economic development, and the efficient movement of goods and services is important to every business. Employers need to be confident that their employees can get to work on time, every day, and workers are more efficient when they avoid long, stressful commutes. As more and more employees now live outside the communities in which they work, efficient *regional* transportation systems are essential to future economic growth. Passenger rail can provide broad-reaching economic benefits through improved safety, lower transportation costs, and enhanced development opportunities at rail station sites. In other parts of the country, new passenger rail systems have increased regional employment, business activity, and productivity. In each community, new rail stations have become centers of activity, stimulating economic growth and raising property values in the area. In the Belen to Santa Fe corridor, proposed station sites are located in or near the traditional downtowns of the communities along the line. The town of Bernalillo for example, is working on integrating the proposed station site into their Main-street redevelopment program. Belen is pursuing a similar course of action with their “Heart of Belen” Becker Street revitalization project. In a September 14th, 2004 news story in the *Albuquerque Journal* Belen officials recognized that the commuter rail service will be an important component of their downtown revitalization plans. The commuter rail service provides another dimension of activity and transport that is very consistent with redevelopment objectives. Rail service is also seen by many as a quality of life issue and asset that can be marketed to prospective businesses considering a move or start up to the region. In today’s global environment, cities don’t compete for economic development opportunities; regions do. Local governments must organize and collaborate for economic development and a safe, efficient transportation infrastructure/network is a fundamental building block of this effort.

There are many questions about how the introduction of Commuter Rail service in this corridor can address traffic congestion and air quality. Part of this answer will not be known with certainty until service is initiated. The other part of the answer is; mitigating and managing congestion and air quality issues in this region will require a concerted effort in many areas including improvements to the public transportation system, roadway capacity enhancements, investments in Intelligent Transportation Systems (ITS), and changes in growth and development patterns. A singular focus on individual projects, roadway or otherwise, without efforts in the other key areas, will not produce an effective response to the forecasted transportation and air quality challenges. This is the case for several reasons. The information provided on congestion earlier indicates how massive the problem is expected to be just in the north south corridor. A single project in this corridor regardless of the type (roadway, bus service, HOV lanes, rail) is not going to change the situation significantly. Despite the lane additions on I-25 in the MTP, for example, congestion is still expected to worsen overtime. Unlike lane additions to the Interstate or other high type facilities in the corridor, Commuter rail can provide an alternative to the traffic congestion. It can provide an alternative for travelers during construction, and it can provide an alternative for travelers when the weather is poor. Because this service will be the first commuter rail service in this state, and will primarily serve markets adjacent to the rail line, it is not reasonable to expect dramatic changes in

urban or regional congestion as a result of the implementation, no more than one should expect a dramatic change in the levels of congestion as a result of a roadway project (e.g. the BIG-I Reconstruction, Coors/I-40 Interchange Reconstruction). Over the longer term, if additional investments are made in public transportation, roadway capacity expansions, Intelligent Transportation Systems, (ITS), and, if the region can figure out ways to change traditional development patterns to some degree, there may be some detectable changes in the levels of traffic congestion during the peak periods. The commuter rail service is an important piece of an overall strategy to manage congestion. Otherwise there is simply too much demand for travel relative to resources and options available to supply capacity.

Air quality is a similar situation. Bernalillo County is designated as a maintenance area for Carbon Monoxide (CO). As part of the development of the MTP the MRCOG in cooperation with the City of Albuquerque Environmental health Department has to produce estimates of CO emissions related to mobile sources. This is accomplished by taking transportation summary statistics (speeds and Vehicle Miles of Travel) from the MRCOG travel demand model (by analysis year) and using them as inputs into Mobile6 (the EPA approved Air Quality Model) which produces estimates of CO for the subject analysis years. In order to insure that Bernalillo County does not exceed CO standards, the results of this analysis are compared to a CO “budget” which is developed independently and represents a ceiling that if exceeded is likely to produce CO levels in Bernalillo County that are beyond the limits set forth by the Clean Air Act Amendments of 1991. The results of this analysis from the MTP are illustrated in Table 4 below.

Table 4. CO Budgets and Projected Emissions from the 2025 MTP (Bernalillo County)

Mobile CO Emissions in Tons per Day	2005	2006	2010	2015	2025
Budget	367.28	312.65	312.65	312.65	312.65
Projected CO Emissions	344.71	308.31	272.01	249.02	246.79
Headroom	22.57	4.34	40.64	63.63	65.86
Daily Vehicle Miles of Travel	15,623,747	16,005,062	17,530,322	18,961,531	21,739,212

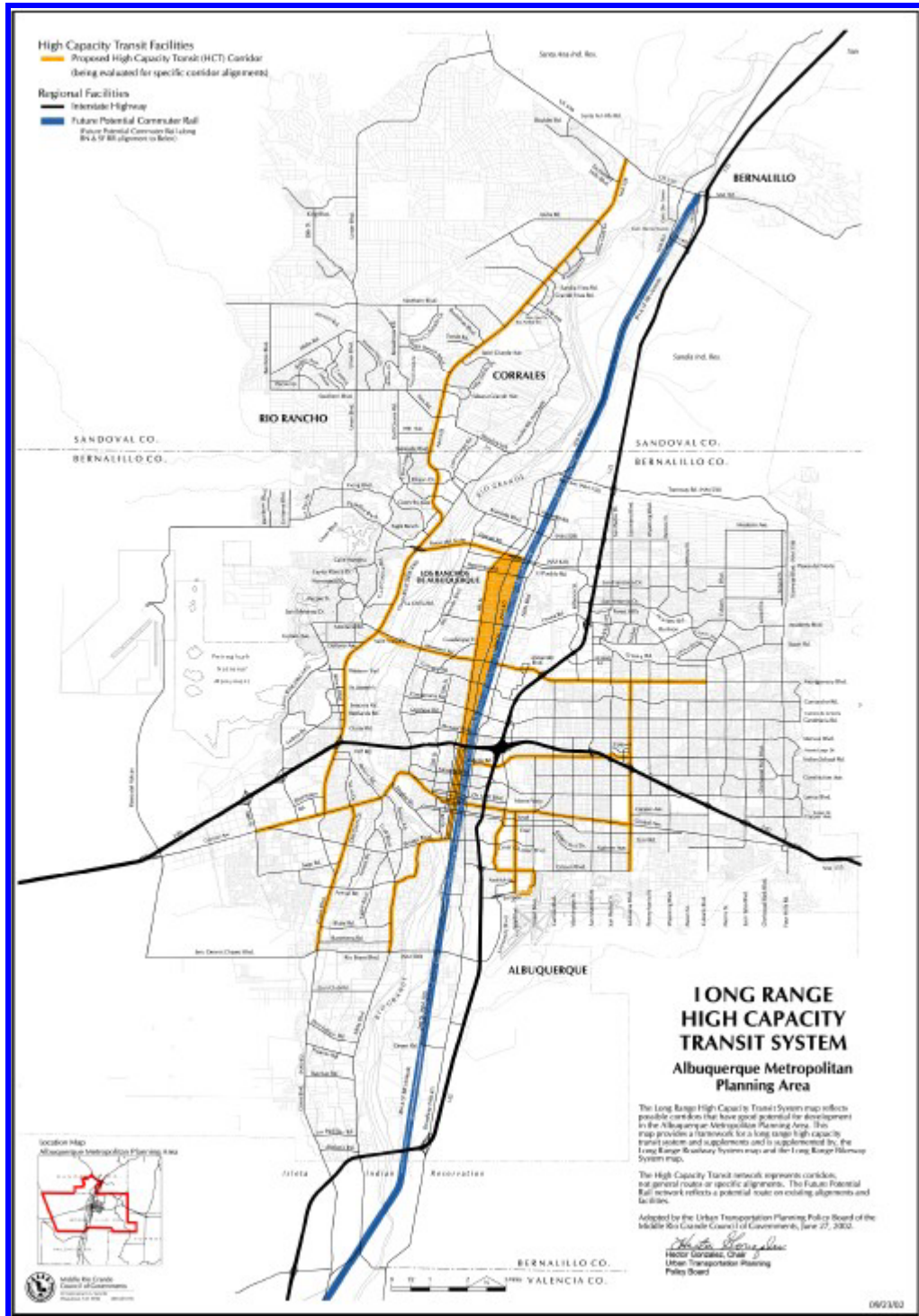
The table illustrates that over the course of the next 20 years CO emissions in Bernalillo County are expected to decline by almost 100 tons. Put another way, the analysis predicts that on a daily basis, 100 fewer tons of CO will be emitted into the atmosphere by mobile sources in the year 2025 than are emitted today despite all of the additional growth in population and Vehicle Miles of Travel. A great deal of this improvement in total emissions is due to an expected continuation of the trend of cleaner burning autos and improvements to fuels. This is one area where future year conditions are predicted to be better than they are today, and well below the budget ceiling. This analysis did not assume that the commuter rail service would be in place. It is anticipated that if it were included, the end result would be a few fractions of a ton lower than those presented in the table. This conclusion is based on a great deal of sensitivity analysis the MRCOG has

already done when evaluating build and no build alternatives for roadway projects both large and small. In almost every case there was no observable statistically significant change in the air quality results. The main reason for this (and it would be the same case for commuter rail) is that even the most significant projects do not materially affect system level average speeds or vehicle miles of travel enough to have an effect on air quality. The transportation system is so large (both in terms of total miles and vehicle miles of travel) that at any given time transportation projects are only affecting an extremely small percentage of the overall system, and this gets reflected in the extremely small changes in system level statistics like CO emissions.

Like many medium size urban areas the Albuquerque region is approaching potential violations to the federal ozone standards. In fact data from many of the air monitors in this region indicate that the trend has been in the upward direction (towards violations) for many years. Many of these monitors have recorded concentrations that regularly exceed 90% of the standard. In the event that this trend continues, and it appears that it will, this region will likely be found to be in non-attainment for ozone. If this occurs it will be more difficult for agencies to utilize federal transportation dollars for general purpose lane additions to the roadway system, there will be additional pressure on transportation agencies to reduce dependency on auto travel, and additional regulatory requirements will need to be developed to reduce the production of ozone. It is not likely, for the reasons cited above, that commuter rail service will prevent this day from coming, but it can serve as a very important piece of an overall strategy aimed at improving the air quality in the region.

The commuter rail project is not the only high capacity transit initiative being considered for this region. The NMDOT in cooperation with the MRCOG and the City of Albuquerque conducted a very detailed transportation systems study of the middle Rio Grande region that was completed in 2001. This work, entitled The Middle Rio Grande Connections Study offered up a series of recommendations for transportation improvements in the region. Part of this work involved developing a system recommendation for high capacity transit. High capacity transit in this case meant rail or other high capacity modes of public transportation. This system was refined and incorporated into what is now known as the MRCOG Long Range High Capacity Transit System Map which is shown in Figure 14 below. This map includes the commuter rail corridor (in blue) and a series of yellow corridors designated for some other form of high capacity transit.

Figure 14. MRCOG Long Range High Capacity Transit Map



This map was approved by the Metropolitan Transportation Board of the MRCOG in 2002. As a follow on to the Middle Rio Grande Connections Study, the City of Albuquerque initiated the Rapid Transit Project (RTP), which has since focused on the implementation of light rail or bus rapid transit in the Central Ave./Lomas Blvd. corridor

between Coors Blvd. and Louisiana. The City of Albuquerque has advanced this project through the Federal Transit Administration (FTA) New Starts process and has completed an Alternatives Analysis and is in the process of completing an Environmental Impact Statement which will identify a precise alignment and system (light rail or bus rapid transit). Like the commuter rail project, this project could provide a very critical high capacity cross river transit link in the east/west direction. The two initiatives together, with a meet point at the Alvarado Transportation Center, could provide the framework for a very effective public transportation system in the middle Rio Grande region.

Finally, there are a number of other angles from which to consider the commuter rail project. There is a population in this corridor that does not drive, and has very poor access to the regions services, educational institutions, jobs and amenities. This population is expected to get larger as the population ages, and the number of elderly people who cannot drive grows. The U.S. Census Bureau projects that the number of Americans age 65 or older will swell from 35 million today to more than 62 million by 2025 - nearly an 80 percent increase. As people grow older, they often become less willing or able to drive, making it necessary to depend on alternative methods of transportation. The cost of auto travel has also climbed significantly over the past ten years, partially due to the price of gas, but mainly due to the other costs associated with auto ownership like the cost of a vehicle, insurance and repairs. According to the Bureau of Labor Statistics Consumer Expenditure Reports the proportion of household income devoted to transportation has risen from 10% in 1935 to 14% in 1960 to about 20% today. Housing is the only category that exceeds transportation as a percentage of household expenses. The American Automobile Associations 2004 estimated cost per mile to drive an automobile is at 56.2 cents. This figure reflects the per mile costs to operate a new car including depreciation, insurance, fuel, and routine maintenance. If this figure is applied to a standard round trip between Albuquerque and Santa Fe of 120 miles the cost per trip is \$67.44. If the average commuter makes this trip 200 times a year the annual costs are approximately \$13,500. And nationally, on average, transportation costs are three times what the average household spends on healthcare. Transportation costs as a percentage of household income are expected to continue to grow in the years to come, making it more difficult for lower income households to afford transportation expenditures.

Commuter Rail Project Status Phase I

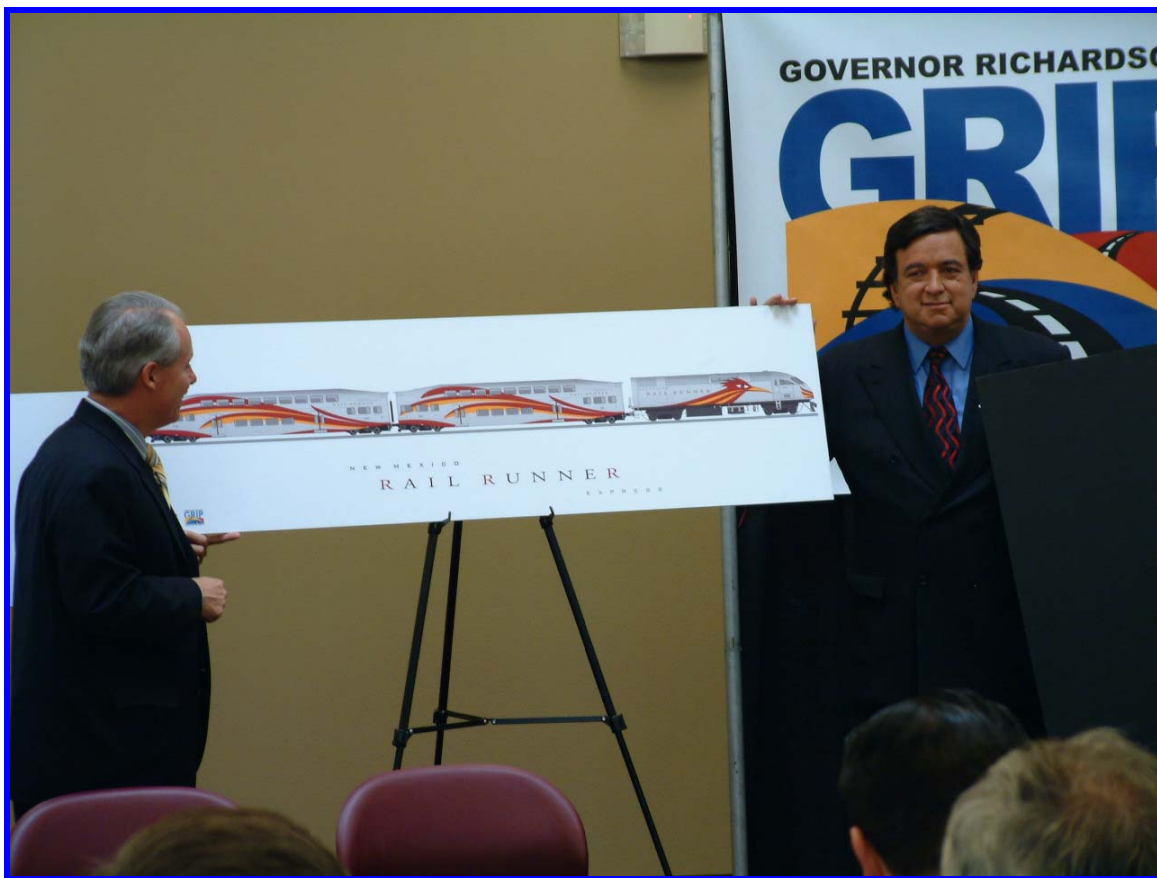
Since August of 2003 the MRCOG and the NMDOT have been working together to accomplish a number of tasks. Most of the work focus has been on Phase I given the nearer term schedule. There are six primary work elements in Phase I. They include the development of a branding and naming scheme, station development, rolling stock acquisition, negotiations with the BNSF, service design, obtaining a contract operator and public involvement. The sections below describe the work that has been accomplished in each of these areas, and work plans for tasks not completed to date. It is important to note that all of these work elements are interrelated, meaning that decisions made for one of these elements can affect all of the others. For example, the times available for the commuter service to run on the track (a BNSF negotiation item) can affect the service

design (schedule) which can have an affect on the number of trains required and the size of the train sets which in turn can influence the platform design. Because of the schedule, the initial focus was on long lead capital items, like station development, the acquisition of rolling stock and the negotiations with BNSF. These efforts have helped define the commuter rail service to some degree, but have also caused a number of iterations in service planning because of the issues mentioned above.

Branding and Naming

On March 21, 2005 Governor Bill Richardson formally announced the name and branding schemes for the New Mexico's commuter rail service at a press conference in Albuquerque New Mexico (see Figure 15 below).

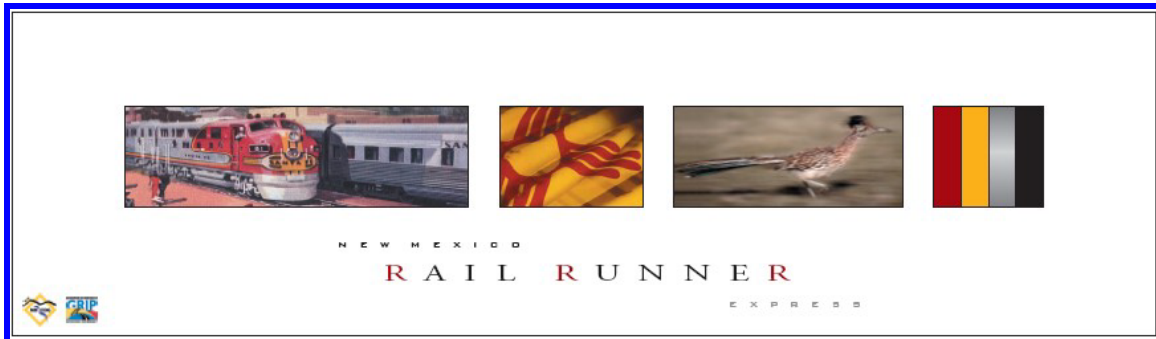
Figure 15. Governor Richardson Unveiling The New Mexico RailRunner Express with Albuquerque Mayor Martin Chavez



The name, “New Mexico RailRunner Express”, colors (red, yellow and silver) and logo (the roadrunner), were chosen after months of research, focus group meetings, and design evaluations. To assist with this work the NMDOT and the MRCOG utilized the firm of Vaughn Wedeen Creative, an Albuquerque based design and marketing firm. The RailRunner name, colors and logo are integral to many aspects of this project including the platform design, train paint schemes and car interiors. The name, colors and logo

were drawn from features of New Mexico's history and heritage (see Figure 16 below) and also provide a very noticeable look to the commuter rail service.

Figure 16: Origins of RailRunner Name, Colors & Logo



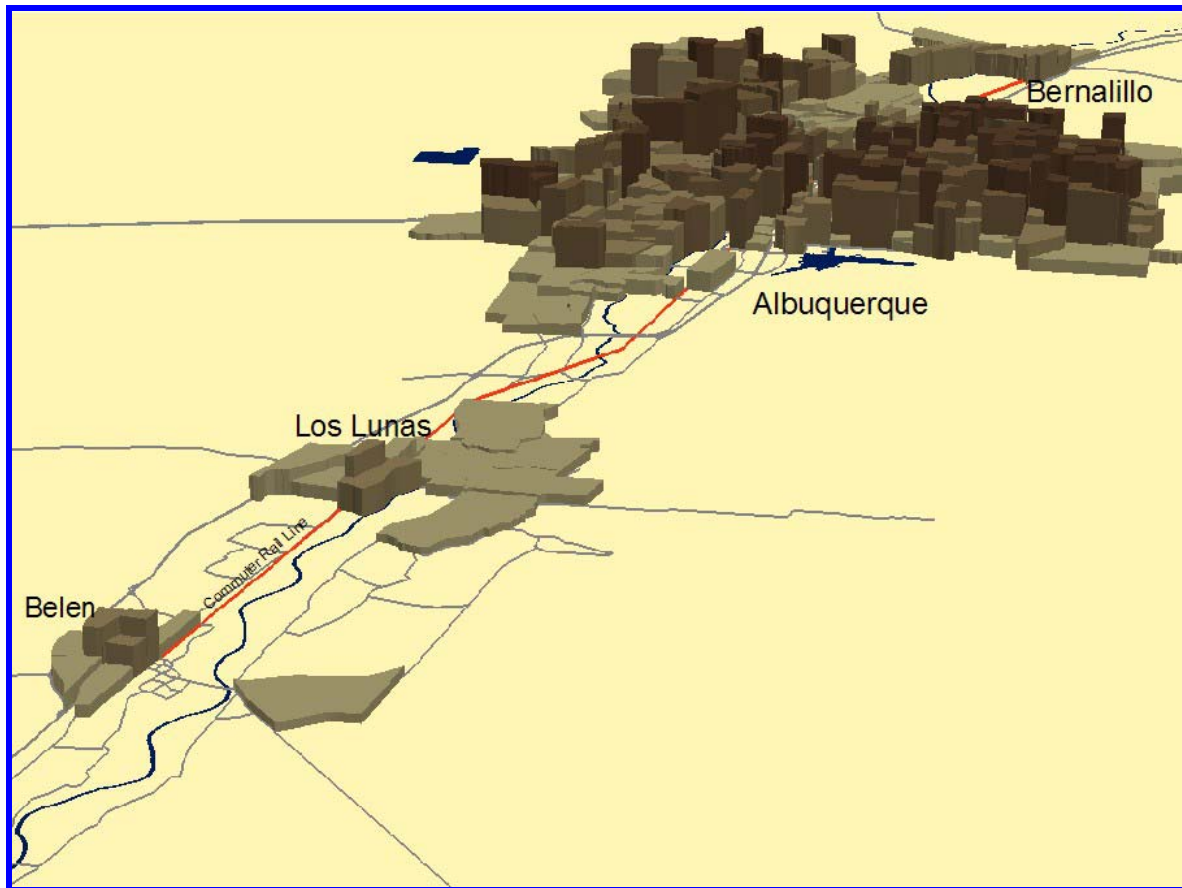
Station Development

Commuter rail stations range from something as simple as a single platform to elaborate multi platform joint use full service inter-modal facilities like Penn Station in Manhattan. In the Phase I corridor most of the stations will be rather simple. At the origin end most will consist of a platform and a parking lot. At the destination end (downtown Albuquerque) the platform already exists as do several buildings that house ABQRIDE, Amtrak and Greyhound.

The process of identifying station locations was guided by a number of parameters. These included more general commuter rail operational characteristics, the existing track alignment, local community preferences, BNSF operational considerations, land availability, existing plans, and the location of population and employment centers. In order for a commuter rail service to be time competitive with the auto it is not desirable to have stations located closer than five miles apart. In order to maximize the potential of the service, station locations should be accessible to population centers on the origin end and employment centers on the destination end. It is also desirable if the station locations on the origin end have good access to the arterial system and have adequate space to accommodate a park and ride market, as well as walk, bike and drop off markets. On the destination end, access by bus, walk and bike to jobs and services are key considerations.

Because the starting point for identifying station locations was the existing line, the first task was to identify general station locations relative to spacing requirements and existing communities. Intuitively, this exercise was already simplified by the project termini. Stations would need to be located somewhere in Belen and Bernalillo, and downtown Albuquerque. From these known points other logical candidate locations were selected based on station spacing and the existence of established communities. Hence Los Lunas, Isleta Pueblo, South Albuquerque, North Albuquerque and Sandia Pueblo were added to the list. This work was guided by a considerable amount of source data (e.g. 2000 Census, population and employment forecasts, aerial photography etc.) like the data depicted in Figure 17 below.

Figure 17. Year 2000 Census Population Data in 3D



Much of this initial work was completed by MRCOG staff. Once these initial locations were identified, it was necessary to look at specific sites along the line and apply another level of detail to the analysis. The MRCOG retained the services of HDR Inc. to assist with this step of the station development process.

One of the initial tasks was to collect basic information on all candidate sites. In some cases, for reasons described below, there was only a single site in a community, in others there were multiple candidate sites identified. The following page illustrates some of information collected for candidate station site profiles.

The information included in these candidate station site profiles provided a baseline to assess the adequacy of the site from a general market, environmental, rail operations, land acquisition, land adequacy and accessibility perspective.

COMMUTER RAIL STATION LOCATION EVALUATION CRITERIA

The purpose of the evaluation criteria is to identify potential commuter rail station locations, evaluate these locations, and select a preferred station location. The Los Lunas and the Albuquerque commuter rail stations are established.

NMDOT/MRCOG COMMUTER RAIL PROJECT STATION SITE ALTERNATIVES SCREENING CRITERIA	
Criteria	Measure
Size of Site	Assessment of the size of the parcel(s) available for the proposed station and park and ride site. Should consider potential for future expansion. Sizes should be determined from scale accurate aerial photos.
Consistency with existing land use and local plans	General assessment of whether the proposed station site is consistent with existing land uses, or reflects existing transit supportive development, plans, or policies.
Economic development potential	Evaluation of the proximity of the proposed station site to areas targeted by local jurisdictions for new development, or intensification of existing development.
Ownership (Public, Private)	Qualitative assessment of the current ownership of parcel(s) impacted by the station site location as shown in county assessors GIS data files.
Proximity of utility services	Qualitative assessment of the location of utilities needed to service the proposed station site. Should be based on locations shown in the MRCOG GIS data and noted in field observations.
Possible impacts on major utilities	Qualitative assessment of potential impacts on major utilities based on locations shown in the MRCOG GIS data and noted in field observations.
Proximity to known hazardous material sites	Qualitative assessment of the potential for hazardous materials either on or in close proximity of the proposed station site. Should be based on a database search and knowledge of previous land use.
Vehicular Access	Qualitative assessment of the ease of access for automobiles from major arterials and other roadways.
Pedestrian/Bicycle Access	Qualitative assessment of the ease of access for pedestrians and bicyclists.
Transit Access	Qualitative assessment of the proximity to existing transit routes
Proximity and ease of access to activity centers	Qualitative assessment of the number and size of activity centers, such as employment centers, recreational facilities, and high density commercial and residential areas served by each proposed station site.
Proximity and ease of access to zero-car and low-income households	Estimation of the extent of households within ½ mile of the proposed station site based on 2000 census data.
Ease of implementation	Estimation of the relative ease of implementation and time required for implementation of each proposed station site based on factors such as construction access/restrictions and other constructability constraints.
Possible impacts on potential historic, archaeological, and cultural resources	Qualitative assessment of potentially historic, archaeological, and cultural resources potentially impacted by the proposed station site based on field observations.
Impacts on floodplains, riparian areas, critical habitat	Qualitative assessment of potential impacts on floodplains, riparian areas, and critical habitat based on data obtained from FEMA and other regulators.

In addition, in the Fall of 2003, the MRCOG formed a Commuter Rail Task Force (CRTF), primarily from MRCOG board members. This group is made up of locally elected officials from communities along the Phase I line. Station site selections were discussed with this group and separately with elected officials from each community. This information was also considered in the site selection process.

This level of effort generated seven initial site locations.

1. Belen: Northeast corner of Reinken Ave. and the railroad tracks.
2. Los Lunas: Courthouse Dr. and the railroad tracks
3. Rio Bravo/Airport: Northeast quadrant of Rio Bravo and the railroad tracks.
4. Downtown Albuquerque: Alvarado Transportation Center
5. North Albuquerque: Northeast Quadrant El Pueblo Road and railroad tracks.
6. Bernalillo: Downtown Bernalillo east of Bernalillo Town Hall.
7. Sandoval County: Southwest Quadrant U.S. 550 and the railroad tracks.

Subsequent discussions with the Sandia and Isleta Pueblo's also resulted in the identification of station sites for each Pueblo bringing the total number of stations for Phase I to nine.

In all cases the sites selected were not expected to be a problem from an environmental, railroad operations, or accessibility standpoint. But, the decision on a final site location was based on different factors in different communities. For example, elected officials from the City of Belen expressed a desire to locate the station as close to downtown Belen as possible. Access and land adequacy issues in the vicinity of Belen produced two candidate sites, one just adjacent to downtown Belen, and one several miles north of the downtown. The site next to downtown was selected because it was favored by the City Council and Mayor of Belen, and also was accessible to a larger population pool than the other location.

In Los Lunas the selection of a station site was relatively simple. The Village of Los Lunas had pursued Federal funds to locate and construct an Inter-modal center for their on demand Transit services program. The site that was identified for this purpose was centrally located in Los Lunas on a piece of land adjacent to the railroad tracks. Because of its purpose, location and size it was considered to be the obvious site for the Los Lunas station.

The station location in south Albuquerque was chosen because it is the only location where enough vacant land exists for a considerable distance along the line, and other candidate sites (Woodward Road and the railroad tracks) would require the disruption and or displacement of some fairly large BNSF operations (UPS offloading and the Ford auto loader facility).

The Alvarado Transportation Center is centrally located in downtown Albuquerque. It is the hub of the City of Albuquerque Public Transportation operations and is also next to the Amtrak station and the Greyhound Bus station. The decision to locate a stop here was

based on these connecting services, and the accessibility of this location to jobs and services that no other location in downtown Albuquerque can match.

There were two potential sites under consideration for North Albuquerque. One at Alameda Blvd. and the railroad tracks and the site that was ultimately selected at El Pueblo. The Alameda site was rejected after an open house in north Albuquerque, primarily due to neighborhood concerns and difficulties providing reasonable access to the site given peak hour traffic volumes on Alameda Blvd.

The site in the Roy Ave./railroad tracks vicinity was provided by the Sandia Pueblo as a potential site for a commuter rail stop. Sandia Pueblo supported the initiation of an Environmental Assessment (which is in progress) to determine which site is most appropriate. After the EA is complete the Pueblo will make a final decision on the implementation of a station.

In June of 2005 Isleta Pueblo expressed an interest in developing a station within the Pueblo boundaries. Although the potential development of this station will be behind the construction of the other stations, the MRCOG and NMDOT are working together with the Pueblo to scope the necessary activities to bring a station on line some time in 2006. Environmental work is now in progress and is focusing on a site just west of N.M. 47 and north of the Isleta Pueblo golf course.

The site in downtown Bernalillo was provided to the MRCOG as the site desired by the Town of Bernalillo for a commuter rail stop. This site and the proposed use are consistent with the goals of the Town of Bernalillo and initiatives they have been pursuing for some time including a main-street program and downtown revitalization. Discussions with elected officials and staff from the town of Bernalillo also resulted in the investigation of an additional site. The site selected for downtown is not well suited for a park and ride, nor is it well suited to capture travelers in the U.S. 550 corridor (Northern Rio Rancho and Placitas). Hence the four quadrants adjacent to U.S. 550 and the railroad tracks were investigated. The southeast quadrant is already utilized for a park and ride and it is frequently near capacity. Expanding this site was considered an option but flood plain issues to the south of the existing parking lot were difficult to manage and there is a considerable grade difference between the parking lot and the tracks that would have required extensive work to address ADA access. The lot directly cattycorner to this site (Northwest quadrant) was also considered, but after an extensive revue of access options from U.S. 550 the site at the Southwest quadrant was selected. Both of the sites were equally as viable for a commuter rail station but access to the site on the southwest quadrant is more direct and feasible.

The selection of a site for each stop was the first step in the development process. Once a site was selected, there are several additional steps needed be taken. Table 5, illustrates the status of some of the tasks for each of the station locations.

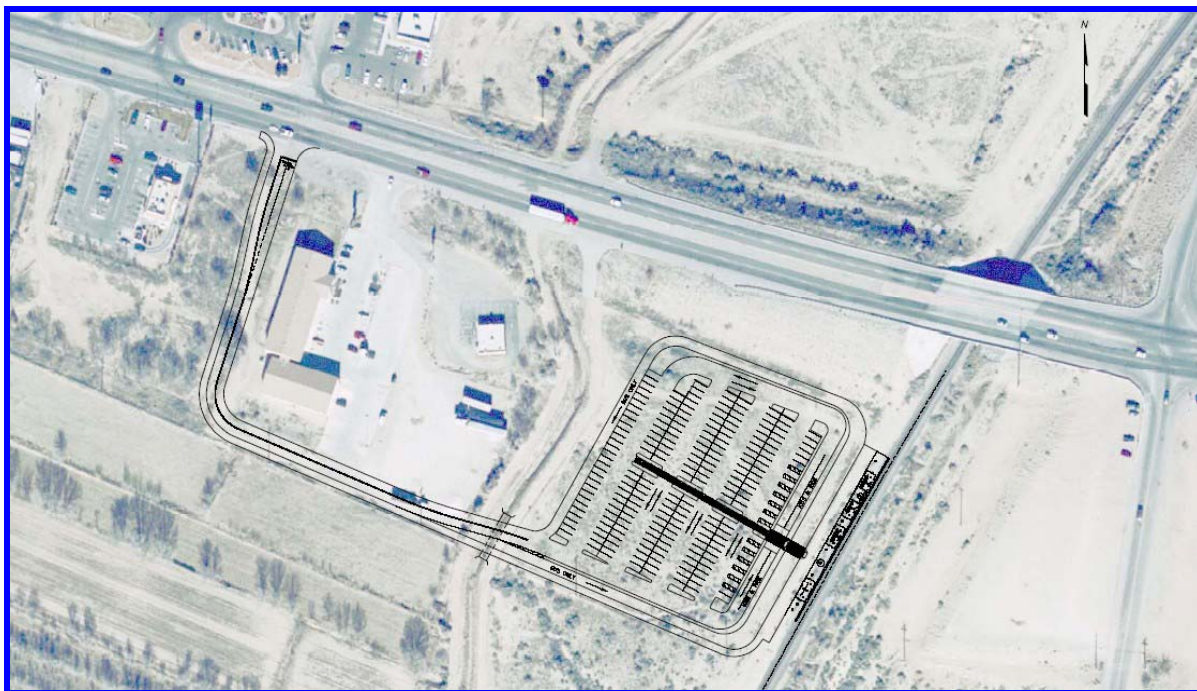
Table 5. Status of Station Development Tasks

Station	Environmental Review*	Survey	Site Plan	Property Acquisition
Belen	Complete	Complete	Complete	Complete
Los Lunas	Complete	Complete	Complete	Complete
Isleta Pueblo	Underway	Complete	TBD	N/A
Rio Bravo	Complete	Complete	Complete	Complete
Alvarado	Complete	Complete	Complete	N/A
El Pueblo	Complete	Complete	Complete	Public
Sandia Pueblo	Complete	Complete	TBD	N/A
Bernalillo	Complete	Complete	Complete	Complete
U.S. 550	Complete	Complete	Complete	In Process/Right of Entry Obtained

*The level of effort varies by site. Includes hazardous materials assessment, historic, archeological and cultural resources, and plant / animal life

After sites were selected, draft site plans were prepared for each station. Since many of the station locations will serve as park and rides, most of the site plans include the station platform and a parking lot, like the site plan for the U.S. 550 site depicted in Figure 18. below.

Figure 18. US. 550 (Sandoval County) Site Plan



In addition to these activities MRCOG and HDR developed a prototypical station platform and initiated efforts to develop architectural themes for the platforms that could represent the local community's identity, and also create a unifying theme and communications protocol (signs, information etc.). Between September of 2004 and the end of February 2005, the MRCOG, NMDOT and HDR worked with each of the local communities to accomplish a number of tasks. They included: finalizing a site plan, acquiring the necessary property, identifying station access improvements, and finalizing the look of the platform and adjacent site work. This effort involved public meetings to gather information and feedback on initial concepts, like the draft mock up of a station platform at the Belen site in the figure 19 below.

Figure 19. Draft Mock Up of the Belen Station Platform



Since this time, additional work has occurred on the design and features of each station. The basic platform has evolved from the mock up shown in Figure 19 to designs that better reflect the interests of the local communities and southwest architecture. Figure 20 illustrates a sample of the revised look.

Figure 20. New Station Platform Design



Work on the Downtown Albuquerque (Alvarado) Station has focused on dressing up the existing platforms and providing better access to the Alvarado Intermodal Center and the soon to be completed Alvarado II, which will house a terminal for inter-city bus service. One of the access concepts is depicted in Figure 21 below.

Figure 21. Alvarado Intermodal Center Access to Train Platform



Another activity associated with the station design is the development of signage, a kiosk and station monument. These features have been added to the final design to produce a prototypical platform that will look similar to the one shown in Figure 22.

Figure 22. Final Platform Design



Final designs were completed for 7 of the nine stations (less Isleta, Sandia) in late June of 2005 and were put out to bid for construction in early July. The bid closed on August 8th. After review of the bid submittals, Twin Mountain Construction Inc. was awarded the contract to construct the seven stations in the bid document. The station construction mobilization process began in mid September and work on the El Pueblo and U.S. 550

sites began in early November. Since all of the station sites require rights of way from the BNSF (for platforms) construction on the remaining sites will not be initiated until New Mexico and BNSF close on the Belen to Bernalillo properties. This is scheduled to occur on January 31, 2006. After the closing, work will be completed on the El Pueblo and U.S. 550 sites and initiated on the Los Lunas and Downtown Albuquerque sites. As work progresses on these sites construction will be initiated at the Downtown Bernalillo and Belen station sites. Construction is anticipated to be substantially complete on the El Pueblo, U.S. 550, Los Lunas and Downtown Albuquerque sites in late March/April 2006. Construction is anticipated to be complete for the Downtown Bernalillo and Belen station sites in late April/May of 2006. Construction of the Rio Bravo site has been delayed to work out agreements with the property owners of the site and will be put out to bid with the Isleta and Sandia sites sometime in the Spring of 2006. These three stations are anticipated to be complete and on line in late Summer 2006.

Rolling Stock Acquisition

Acquiring rolling stock, (engines and passenger cars), for the commuter rail project was a particularly challenging element of the overall project implementation. Based on information acquired from other commuter rail agencies, the typical time frame for acquiring new vehicles was on the order of 2 to 3 years from the date of order. Used equipment was also in very short supply, with the exception of some very old equipment owned by Metra, Chicago's commuter rail operator. The MRCOG hired LTK Engineering Services, a nationally recognized firm in the arena of commuter rail equipment acquisition to help seek out rolling stock solutions for the operation.

One of LTK's first tasks was to advise the MRCOG on the availability of used equipment, and potential options for acquiring new equipment. LTK's review of the used passenger car market yielded very few results. The Virginia Rail Express was exploring the possibility of selling their fleet of year 2000 Kawasaki bi-level cars, but a decision was not forthcoming. Metro in New York had some single level cars that they were thinking about selling, but follow up conversations with Metro revealed that this was not the case. Metra in Chicago was dispensing some old 1960s vintage gallery cars. These cars are not ADA accessible, have asbestos in the walls and many of them were finished with lead based paint. In the late spring of 2004 LTK advised the MRCOG and the NMDOT that the Southern California Regional Rail Authority (SCRRA) was in the process of selecting a contractor for the design and construction of new passenger rail cars. As part of this process the MRCOG contacted the SCRRA and requested an option on the final contract for new cars. Securing an option on another agencies car order carries no immediate financial obligation it simply provides a place holder if the agency holding the option chooses to exercise it. MRCOG was granted an option by the SCRRA but the earliest new cars would be available under this option was late 2007. The SCRRA process has since been protested and due to events described below MRCOG withdrew the option on the SCRRA car procurement.

On the locomotive side LTK evaluated new engines, but a two year delivery time frame is standard and each locomotive would cost between \$3.0 and \$3.5 million. Rebuilt

engines can be acquired but the time frame on these is typically a year to eighteen months, and the typical cost is between \$1.8 and \$2.5 million. LTK also located several AMTRAK used P-40 locomotives that were not being utilized by Amtrak due to service cut backs and Amtrak's recent acquisition of a series of new P-42 engines. The P-40s were built in 1993 and have only been out of service for a relatively short time period.

In order to move on the passenger car issue the MRCOG and the NMDOT decided to release an RFP with a technical specification for service proven bi-level cars, new or used. LTK wrote the majority of the technical specification and the RFP was released in July of 2004, and closed in August of 2004. A total of four responses to this RFP were received. All but one proposed new cars, the remaining offered Chicago Metra Gallery cars "as is". A selection committee was assembled as part of this RFP process and proposing firms were rated based on the criteria in the RFP. Bombardier Transportation was selected to provide the cars for the service. A contract with Bombardier was negotiated and executed to build up to 10 new bi-level coaches with a proposed delivery of all cars within one year of notice to proceed. The bi-level cars selected contain about 140 seats per car and can carry up to 200 persons per car, seated and standing. The cars actually have three levels; a low level boarding level with seats, a restroom and accommodations for bikes and wheelchairs, a mid level at each end of the car and an upper level. Of the 10 cars ordered, 6 are referred to as "cab cars". These cars have an engineers cab at one end of the coach, which allows the engineer to run the train from this end of the train. A cab car will always be situated at the end of the train, so that the trains can be run in a "push-pull" mode, which means that in one direction the engine will be at the front of the train, but when the train runs in the opposite direction, the cab car will be at the front end of the train. This allows trains to reverse direction on the line without having to turn around at the end points.

The first car was completed in a little over eight months from notice to proceed, setting a new record in car construction time. The remaining 9 cars have all been constructed and transported to Albuquerque. The last car arrived at the end of October, 2005. Figure 23 shows several of the cars in Albuquerque.

Most of the seats in the car are in a "knee to knee" configuration with a small table separating facing passengers. In most cases standard AC power outlets are available next to the tables so that passenger's will be able to power their own electronic devices, such as laptops. Several of the cars are equipped with ADA accessible restrooms, bike tie downs and wheel chair locks. They also include overhead luggage racks and digital message boards. The MRCOG and the NMDOT are also evaluating the potential for providing wireless internet service in the coaches. Figure 24 illustrates the interior of one of the completed cars.

Figure 23. Bombardier Bi-Level Coaches In Albuquerque



Figure 24. Car Interior (Lower Level)



In late July 2004 Amtrak issued a request for bids on their P-40 locomotives. LTK inspected each of the locomotives and prepared an estimate of the cost associated with making each of the locomotives service ready. In addition they provided the MRCOG and NMDOT with an estimated present value for each locomotive, to serve as a basis for a potential bid. MRCOG and the NMDOT submitted a bid on six of these Amtrak locomotives. The closing date for bids was September 15, 2004. Amtrak did not accept the bid provided by the MRCOG and NMDOT. After several subsequent failed attempts to reach a reasonable price for the purchase of these locomotives with Amtrak, the MRCOG and the NMDOT decided to look at other options.

The most promising (given the time constraints) was to utilize a purchase option from another transit agency to acquire locomotives. The San Joaquin Regional Rail Commission granted the MRCOG and the NMDOT an option to purchase up to five locomotives from Motive Power Inc. in Boise, Idaho. A contract with Motive Power was negotiated to acquire four Diesel-Electric MP36PH-3C locomotives with an option for a fifth. These engines are EPA Tier 1 compliant and contain the latest engine and cab technologies.

These locomotives were built in Boise Idaho at Motive Power's production facility depicted in Figure 25 below.

Figure 25. Motive Power Production Facility, Boise, Idaho



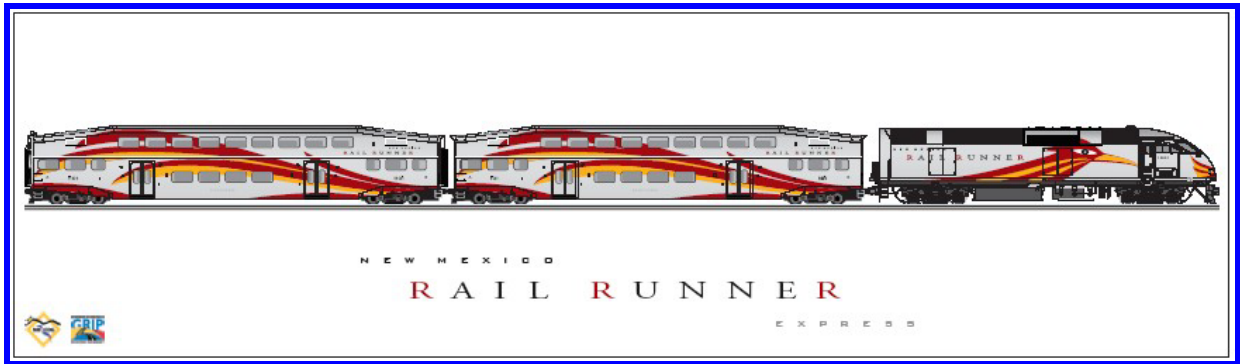
The locomotives produce about 3600 horsepower and are capable of running speeds in excess of 100 mph. They hold about 2000 gallons of fuel and get about 1 mile to the gallon. Since they run on diesel fuel the MRCOG is investigating the potential use of bio-diesel as a fuel source for the locomotives. The locomotives were scheduled for delivery to Albuquerque in October, November and December of 2005. The first unit arrived in Albuquerque on October 10th. The second unit arrived in mid November, and the remaining units have shipped from Boise and are en route to Albuquerque. All three are expected in Albuquerque no later than the end of January. Figure 26 depicts the first completed locomotive in Boise, Idaho prior to shipping.

Figure 26 Locomotive 101 In Boise, Idaho



Figure 27 illustrates what a train set will look like with the Motive Power Locomotives, Bombardier Bi-Level cars and the New Mexico RailRunner Express paint scheme. Note that the roadrunner head is on the engine and cars display the tail feathers. Since these train sets will be run in a “push – pull” the roadrunner will be going backwards half the time!

Figure 27. Final Train Set



Negotiations with the BNSF

The BNSF Railroad owns the rail line running north out of Belen all the way to the New Mexico state line at Raton and beyond. This line used to be a critical link in the freight and passenger network of the now defunct Atchison Topeka and Santa Fe railroad (AT&SF). Because the BNSF owns the line and the rights of way proposed for use by the commuter rail service for Phase I, the MRCOG and the NMDOT engaged in negotiations with the BNSF to explore alternative arrangements for the use of the line. Late in the Fall of 2003 MRCOG solicited and selected private sector expertise to assist in the process of negotiating with the BNSF. The consultant selected for this particular area is Lonnie Blaydes Consulting. This negotiation process started in earnest in January of 2004. The discussions started with a clear message from the BNSF that while this line was underutilized they were going to be very sensitive to aspects of the commuter rail service that may impact their ability to move freight on the line. As an initial step in the negotiations the BNSF asked for a rough sketch of potential service parameters (times the line would be utilized by the commuter rail service) so that they could perform an initial “engineering assessment” of the potential impacts created by the service parameters and advise the MRCOG and the NMDOT accordingly. The MRCOG provided BNSF with this initial set of information in February of 2004. By March of 2004, the BNSF provided the MRCOG and NMDOT with feedback on the draft parameters. This included the need to extend several existing sidings on the line, the addition of a couple of new sidings, the signalization of the portion of the track between Belen and Isleta Pueblo and improvements to several track and road crossings (necessitated primarily by the new track based signal system). Most of these improvements were needed to increase the carrying capacity of the line to minimize or remove potential time conflicts with BNSF freight and Amtrak passenger movements.

After March of 2004 additional discussions with the BNSF took place, in part to test the implications of alternative service options against the capital improvements required to accommodate the service options. This was necessarily an iterative process, as the BNSF, MRCOG, the NMDOT, and consultants working on the project explored service options and the resulting improvements at greater levels of detail. This included track and signal improvements but also the accommodation of station platforms, dispatch, safety and

current and future BNSF operations in the corridor. In addition, the BNSF was asked to respond to several different use arrangements including the purchase of the line, a lease of time on the line, and the purchase of an easement.

The MRCOG, BNSF and HDR also concluded a very detailed assessment of all the roadway crossings of the line to aid in the identification of safety improvements. A large part of this work effort involved updating information on each crossing that was held by either BNSF or the NMDOT, including the crossing type (public/private), traffic volumes, site characteristics (visibility and geometrics), adjacent or accessible land uses, and crossing function (arterial, service road, agriculture).

Substantial progress was made on many of the technical issues. In fact there were very few cases where the need for improvements was disputed. On September 28th 2004 Governor Bill Richardson signed A Memorandum of Understanding with the BNSF which outlined the intent of both parties to complete a transaction for the commuter rail service. Draft Joint Use and Purchase and Sale agreements were generated and negotiated at constant two week intervals between March of 2005 and September of 2005. After considerable legal review and multiple revisions final agreements were generated in early November of 2005. They include a Joint Use Agreement; which describes the relationship between the parties (BNSF and New Mexico) and how business will be conducted on the line (priorities, maintenance responsibilities, dispatch, service provisions), and three purchase and sale agreements which describe property sales for each of the three property transactions (Belen to Bernalillo, Bernalillo to Lamy and Lamy to Trinidad Colorado. It is worth noting that through the course of the negotiations BNSF's price for the line went down significantly, as did their requirements for track and signal improvements. Keep in mind that these agreements took the better part of two years to complete so if a complete understanding of all of the details of the agreements is desired, a thorough reading of all of the agreements is probably necessary. The significant pieces of the agreements are as follows:

Property Acquisition

Through three separate closings, that will occur over the next three years New Mexico will acquire the line and associated rights of way from Belen, New Mexico to Trinidad, Colorado for \$75 million. Specifically, New Mexico will assume all of BNSF's right, title, and interest in improvements located on the land including signals, rights of way and track, right, title and interest in any tangible personal property and fixtures of any kind owned by BNSF and attached to or used exclusively in connection with the ownership, maintenance or operation of the railroad, and right, title and interest to third party leases/easements other than fiber optic agreements as of the date of closing. BNSF reserves for itself and its successors an exclusive easement for freight railroad purposes, including, but not limited to, the construction, maintenance, repair, replacement and operation of freight rail and associated facilities, subject to the provisions of the Joint Use Agreement.

The first closing which will occur in late January of 2006 will result in the purchase of the line, spurs, rights of way etc. for the portion of the corridor between Belen and Bernalillo. The cost for this segment is \$50 million. There is about 51 miles of mainline track and 10 miles of spur line track in this segment. In most places along this section New Mexico will acquire the full width of the corridor that is currently owned by BNSF. For most of the corridor this width is 100 feet. BNSF will retain the Abajo Switching Yard, and the Auto Offloading and Inter-modal facilities in the southern part of Albuquerque. New Mexico will receive additional width properties that BNSF owns in Belen and Downtown Bernalillo that will be utilized for stations.

The second closing, which is scheduled to occur in January of 2007 will result in the purchase of the line, rights of way etc. for the portion of the corridor between Bernalillo and Lamy, New Mexico. The cost for this segment is \$20 million. There is approximately 48 miles of mainline track and four miles of spur track in this segment. New Mexico will acquire the full width of the corridor that is currently owned by BNSF. For most of the corridor this width is 100 feet.

The third closing, which is scheduled to occur in December of 2008 will result in the purchase of the line, rights of way etc. for the portion of the corridor between Lamy and Trinidad, Colorado. The cost for this segment is \$5 million. There is approximately 200 miles of mainline track and 30 miles of spur track in this segment. New Mexico will acquire the full width of the corridor that is currently owned by BNSF. For most of the corridor this width is 100 feet.

Rights

The Joint Use Agreement defines the ongoing relationship between New Mexico and BNSF for use of the rail line purchased by New Mexico. A key concept of the Agreement is that New Mexico *owns* the corridor and BNSF becomes a *tenant* of New Mexico. **As owner of the corridor New Mexico controls its own destiny.** Important rights identified in the Joint Use Agreement include:

With the exception of signals on the Belen-Isleta segment (which New Mexico would have installed regardless) capital improvements are determined by New Mexico, not mandated by BNSF. This contrasts with the \$40-50 million improvements BNSF was insisting on prior to purchase.

After the second closing in January 2007, **New Mexico may operate as many trains as it wants on the corridor provided they do not unreasonably impact BNSF freight operations.** Until that time New Mexico can only run the number of trains discussed in the service design section below.

After the third and final closing New Mexico may take over dispatch of the corridor. Prior to dispatch take over New Mexico pays BNSF a flat fee for dispatch services.

Commuter Rail trains have priority over freight trains in the corridor.

BNSF retains the obligation to serve the rail freight customers. New Mexico does not have to provide any rail freight service.

Before each closing New Mexico has the opportunity to conduct any necessary environmental due diligence on the corridor. If sites are identified that New Mexico does not want due to environmental conditions, BNSF can either cure the sites before the property is transferred, remain the responsible party for the environmental condition or retain ownership of the property.

Responsibilities

After each closing New Mexico is responsible for maintaining the track, signals and rights of way for the segment. Where Rail Runner Express trains and BNSF freight both operate, BNSF must pay New Mexico its proportionate share for BNSF use of the corridor. The use is measured by Gross Ton Miles (GTM) and BNSF freight trains are much heavier than Rail Runner Express trains. BNSF freight service will thereby contribute to the operating cost of rail runner Express service.

For the track between Bernalillo and Lamy, where Rail Runner Express does not initially operate, BNSF and Amtrak will pay for most of the maintenance costs. For the portion of the track between Lamy and Trinidad, BNSF & Amtrak will pay 100% of the maintenance costs of a minimum track and signal standard for at least 7 years. After 7 years, New Mexico has no minimum standard of maintenance and BNSF must pay at least its average level of maintenance costs for the previous years. If New Mexico chooses to run service that is more frequent than 12 trains per year on any segment between Bernalillo and Trinidad, Colorado, maintenance shares will be based on the GTMs of the users for the segment New Mexico is using. The 12 trains per year provision was incorporated into the deal so that New Mexico could run excursion and special trains on these segments without triggering the maintenance cost share based on GTMs.

New Mexico will maintain a \$200 million (standard for new commuter systems in the west) insurance policy for Rail Runner Express service. New Mexico will also maintain a \$50 million escrow fund to guarantee its insurance and liability responsibilities.

Every five years, both NMDOT and BNSF will review the safety record of the commuter rail operation to determine whether to reduce the amount of money in the escrow account.

Is this a good deal?

There are a variety of ways this purchase can be viewed within the context of other transportation investments. It is more difficult to compare this type of transaction to other

types of public agency transactions that involve large sums of money. First, public agencies do not buy long stretches of rail corridors everyday. However there are some recent transactions that do provide some comparative context. The Utah Transit Authority (UTA) purchased a 25 foot wide, 175 mile long corridor from Brigham City to Payson in 2002. About 40 miles of the corridor includes track, for the remainder it is just rights of way. UTA paid \$185 million to purchase the corridor from the Union Pacific. Because the purchase did not include the actual track for a majority of the corridor this has translated into higher project development costs. The first phase of UTA's commuter rail project will utilize about 44 miles of this right of way. Construction costs including track, signals, cars, locomotives and stations for this first phase are estimated at \$500 million, which is a little over \$11 million per mile. Sounder Transit in Seattle negotiated an agreement with the BNSF to run up to 30 commuter rail trains a day on existing BNSF track between Seattle and Tacoma (a distance of 32 miles). Sounder pays an annual fee to run trains, but also paid the BNSF \$331 million for track improvements to create additional capacity on the line for the commuter trains. In 2003 Sounder Transit negotiated a 97 year easement to run four trains a day on the BNSF's 37 mile long line between Seattle and Everett Washington. The Sounder has agreed to pay the BNSF \$258 million for track improvements. As part of this same transaction Sounder purchased 21 miles of line between Tacoma and Lakewood Washington for \$32 million. From 1991 to 2000 the Southern California Regional Rail Authority (SCRRA) purchased approximately 340 miles of track and rights of way from the Union Pacific and the BNSF in the Los Angeles area for their commuter rail system Metrolink. SCRRA has paid out a total of \$705 million for these purchases. In 1983 the Trinity Rail Express (TRE) which now operates commuter rail between Dallas and Fort Worth Texas, paid \$34 million for the 34 mile line that connects the two cities. The line was purchased from the Rock Island Railroad.

The New Mexico transaction is much more favorable than these both from a cost and control perspective. The capital costs for the Belen to Bernalillo phase, which is about 48 miles in length, are about \$75 million plus the \$10 million in value added improvements provided by Sandoval County. If the purchase of the first phase is added to these development costs the end result is a total Phase I cost of \$135 million. This translates into a \$2.8 million cost per mile for a fully developed system, which is \$8 million dollars a mile cheaper than UTA's first phase. Much of this difference can be attributed to fact that the New Mexico purchase involves the acquisition of a very high quality line, with very little existing use, for a very reasonable price. As noted later in this report the Denver region voted in November of 2004 to increase sales taxes by a half percent to generate about \$4.7 billion over the next 10 years for the purpose of constructing 3 new light rail, and two new commuter rail lines in the Denver area. While the commuter rail lines have yet to be developed, they are estimated to cost between \$7 and \$10 million per mile.

From a pure cost perspective the New Mexico transaction resulted in the purchase of 300 miles of track, rights of way etc. for \$75 million, which translates into a cost per mile of about \$250,000. The transactions listed above indicate that it is not unusual to pay on the order of at least \$1 million per mile for a railroad corridor (track or not). If these costs (\$1

million per mile) are applied back to the New Mexico transaction one might expect an overall cost in the \$250 - \$300 million range. But it is also important to consider aspects that go beyond the pure cost comparisons. New Mexico purchased a railroad that is in very good shape, and has very little freight traffic on it. This translates directly into significant cost savings on the project development side as illustrated by the comparisons to the Denver and Utah. If New Mexico had not acquired this track, and was looking at full development costs associated with new alignments on property that needed to be acquired, the overall Phase I costs would be closer to \$10 million per mile, resulting in a fully developed Phase I cost of \$480 million (as opposed to the \$135 million that New Mexico will expend). This doesn't even factor in the amount of additional time and controversy that would be associated with property acquisition and track construction.

In addition, New Mexico's ownership of the rail line will provide the state with the ability to control its own future in terms of train dispatch, necessary capacity improvements and working with local communities that may have interests in joint uses of the rights of way. The corridor from El Paso to Albuquerque and on north to Denver is a vital transportation link today, and its importance will grow significantly over time as population increases. This transaction preserves a substantial portion of this corridor for future transportation needs. Finally, the BNSF plans to invest proceeds from this sale back into capacity improvements on their east west transcontinental line in New Mexico. This will create more jobs for residents of New Mexico and position the BNSF to increase the amount of freight moving in this corridor, which will produce a secondary benefit for Interstate 40 between Tucumcari and Gallup.

It is true the purchase of the line from Lamy to Trinidad, Colorado was mainly done with future corridor preservation in mind. It also only cost \$5 million. New Mexico will have to maintain this piece of railroad when it is acquired from the BNSF in December of 2008, but the transaction is structured to insure that New Mexico will not incur any long term financial liability as a result of this maintenance responsibility. If New Mexico tried to acquire a 200 mile long 100 foot wide piece of property in this increasingly strategic transportation corridor, for any number of uses, the studies, legal research and surveying activities alone would probably exceed \$5 million.

The NMDOT commissioned a valuation of the line from Belen to Trinidad, Colorado from a functional perspective. This valuation focused on the value of the infrastructure based on the cost of replacement less depreciation. The end result of this process was a line value of \$151 million, twice the purchase price in the transaction. This value did not include the price of the land in the corridor.

Arguments can, and will be made that these dollars should have been spent on other transportation initiatives, that have more perceived value instead. This is always going to be the case anytime large expenditures are allocated for transportation projects. However, this report has already indicated that additional expenditures on roadway lanes etc., while necessary in many cases, do not produce the same kinds of travel time benefits that rail does. Adding an extra lane on I-25 between Belen & Santa Fe has been estimated to cost \$420-\$440 million. This improvement does not substantially change mobility in the

corridor and the price for admission for the user is still the cost of a car, insurance, gas and maintenance.

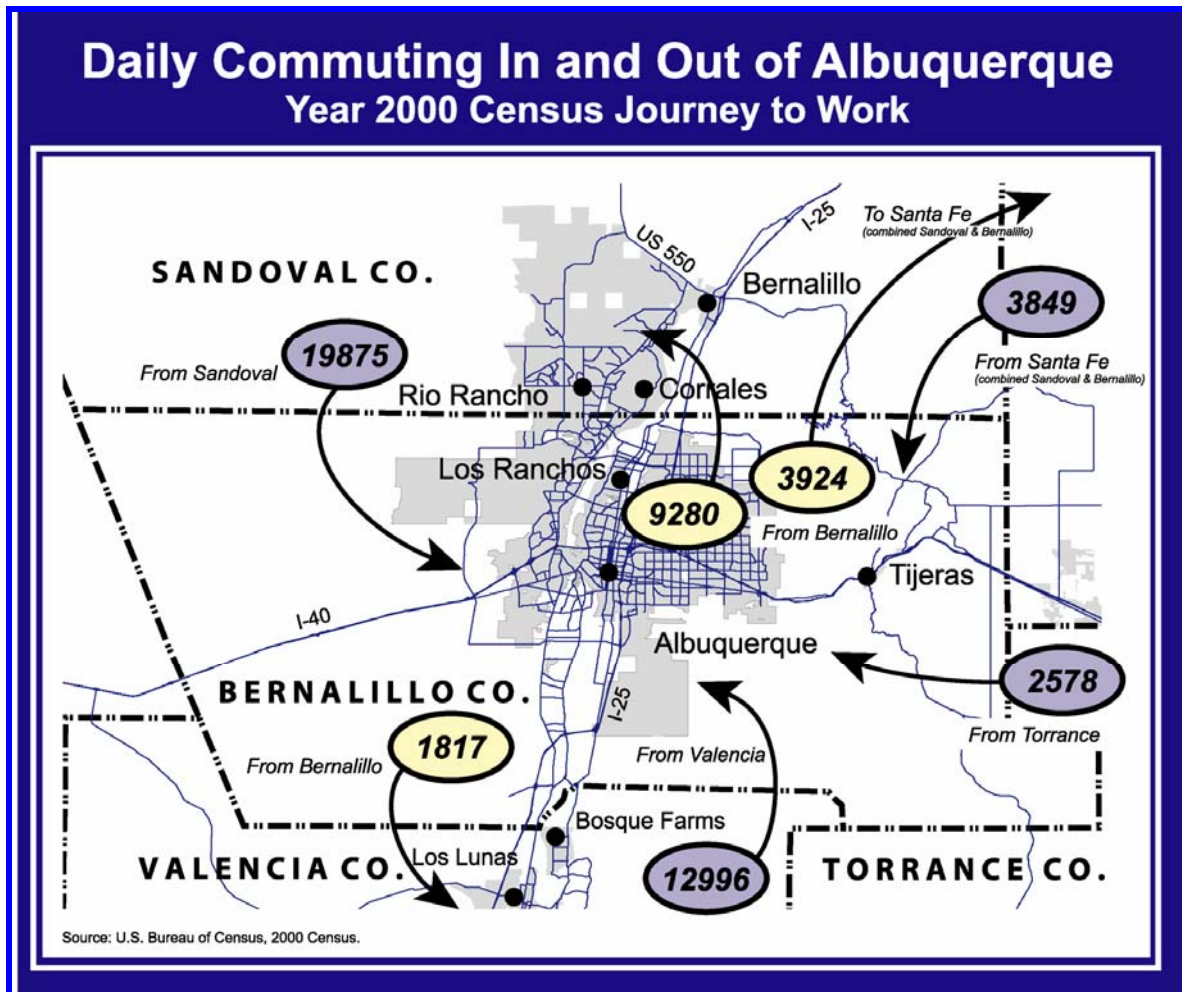
Service Design

Developing a final service design for Phase I has involved the consideration of a number of sub elements that include market analysis for multiple trip purposes, train schedules and frequency of service, connecting services, fare structures, surveys of travel behavior and competing auto travel times. These items are all interdependent to some degree and interdependent with the major elements discussed previously. For example, train schedules and frequency, are one determinant of market shares and a large determinant of operating costs. Connecting services are an important dimension of the market analysis which can effect patronage. The service design in this corridor could potentially impact freight movements which can affect the need for track and signal improvements.

To address these interdependencies, the MRCOG and NMDOT pursued the development of a service design for Phase I in an iterative matter in coordination with the other elements of the project, and within the context of the budget for Phase I. Most of the service design related work has been accomplished utilizing MRCOG staff with some assistance from Planning Technologies LLC, a firm retained by the MRCOG to assist with model development and enhancements and planning technical support.

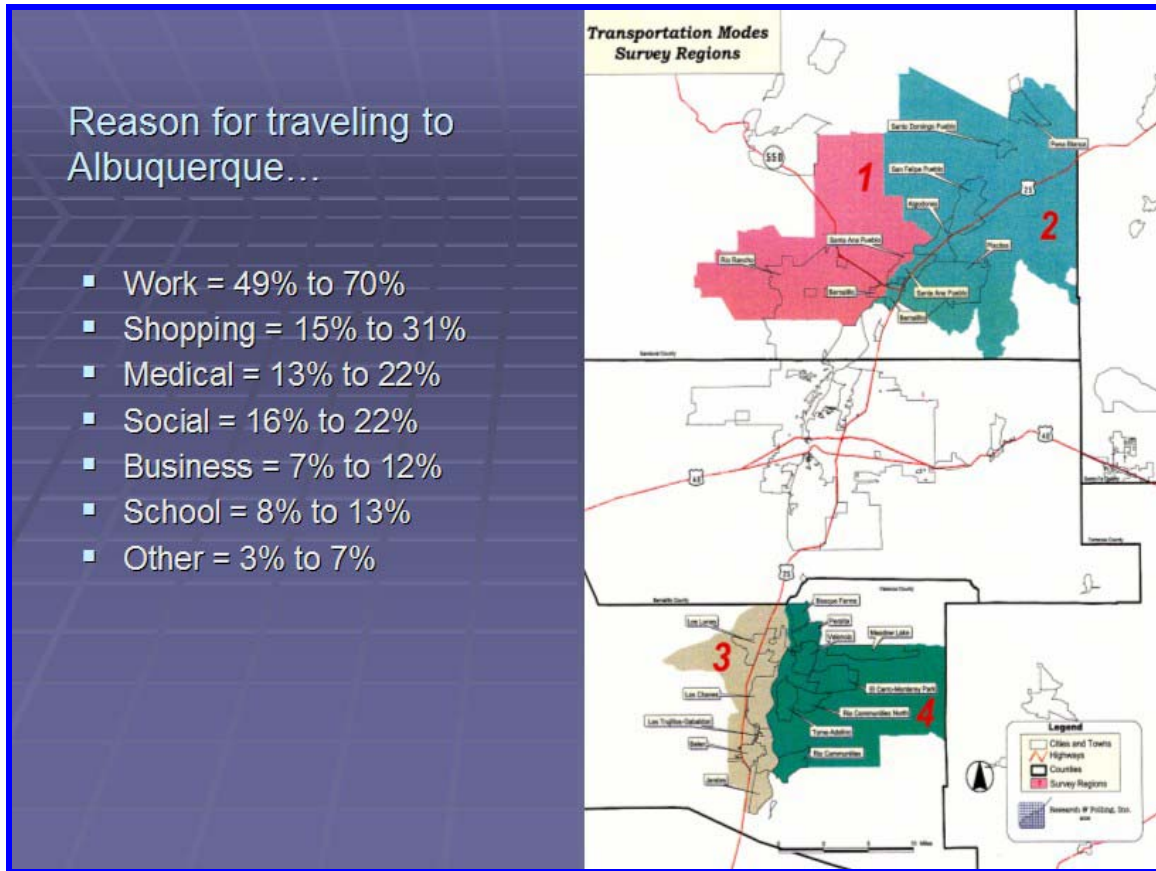
For the market analysis, early work focused on summarizing year 2000 Census data, reviewing relevant previous studies, developing origin and destination data from the Census Transportation Planning Package (CTPP) and results from the MRCOG travel demand model. For example some of the first data available from the CTPP were county to county work trip tables. The county to county data indicate that in the year 2000 an estimated 12,996 people living in Valencia County worked in Bernalillo County (see Figure 28 below). Only 1,817 persons lived in Bernalillo County and worked in Valencia County. Figure 28 also shows sizable commute exchanges between Sandoval County and Bernalillo County in both directions. The data for work exchanges between Santa Fe County and the counties of Bernalillo and Sandoval shows that almost 4,000 persons that are living in Bernalillo or Sandoval County work in Santa Fe, and about the same number live in Santa Fe County and work in the counties of Bernalillo or Sandoval. Further analysis has since indicated that about 3,000 of these persons are actually coming from Town of Edgewood. This information does not show the total number of exchanges between counties because it is based on the Census long form, so it is only an indication of regular commute flows. Data collected from MRCOG traffic counts reflect much higher volumes of traffic between these counties, but the traffic counts capture all trips (work, shopping, education, business, tourism etc.). This information did provide the MRCOG and the NMDOT with a basis for understanding the relative size of the work market related exchanges between counties.

Figure 28. Summary of Year 2000 CTPP County to County Commuter Flows



Another part of this early work focused on an extensive survey of travel behavior in the commuter rail corridor that was generated by the City of Albuquerque as part of the Rapid Transit Project. This survey, conducted by Research and Polling in March of 2003, included 69 questions and generated some very specific and useful information about travel markets between northern Sandoval County and Valencia County and the City of Albuquerque. The survey was completed for 1000 households and the results have a stated margin of error of 3.9% at the 95% confidence level. Figure 29 illustrates the results of one particular question from the survey.

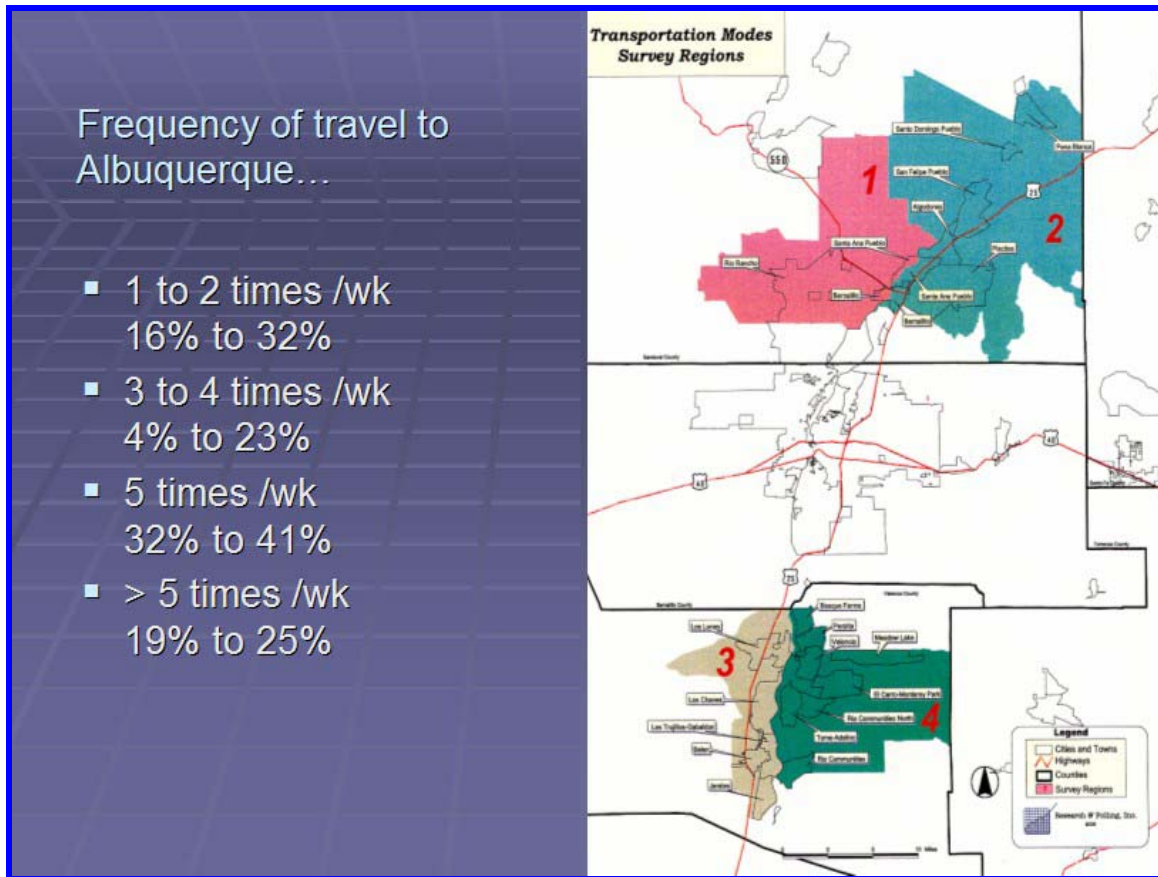
Figure 29. Trip Purpose to Albuquerque



The map on the right of the figure indicates the four areas the survey results were summarized from. Area 1 includes the northern portion of Rio Rancho and the portion of Santa Ana Pueblo on the west side of the Rio Grande. Area 2 includes the communities of Bernalillo, Placitas, Algodones and Pena Blanca and the Pueblos of Santa Ana, San Felipe and Santa Domingo. Area 3 includes the developed portion of Valencia County on the west side of the Rio Grande, and area 4 includes the developed portion of Valencia County on the west side of the Rio Grande. Figure 29 illustrates survey respondent's reasons for traveling to Albuquerque. The range in percentage is due to the vary rates from the 4 areas. It is clear that the work trip is the largest market based on this survey, which is a positive result for commuter rail service, but other notable trip purposes include shopping, medical and social.

Figure 30 illustrates the results to another question from the same survey. The results indicate that many of the respondents travel to Albuquerque **5 or more** times a week (51%-66%). This is a positive indication of a stable customer base for commuter rail service.

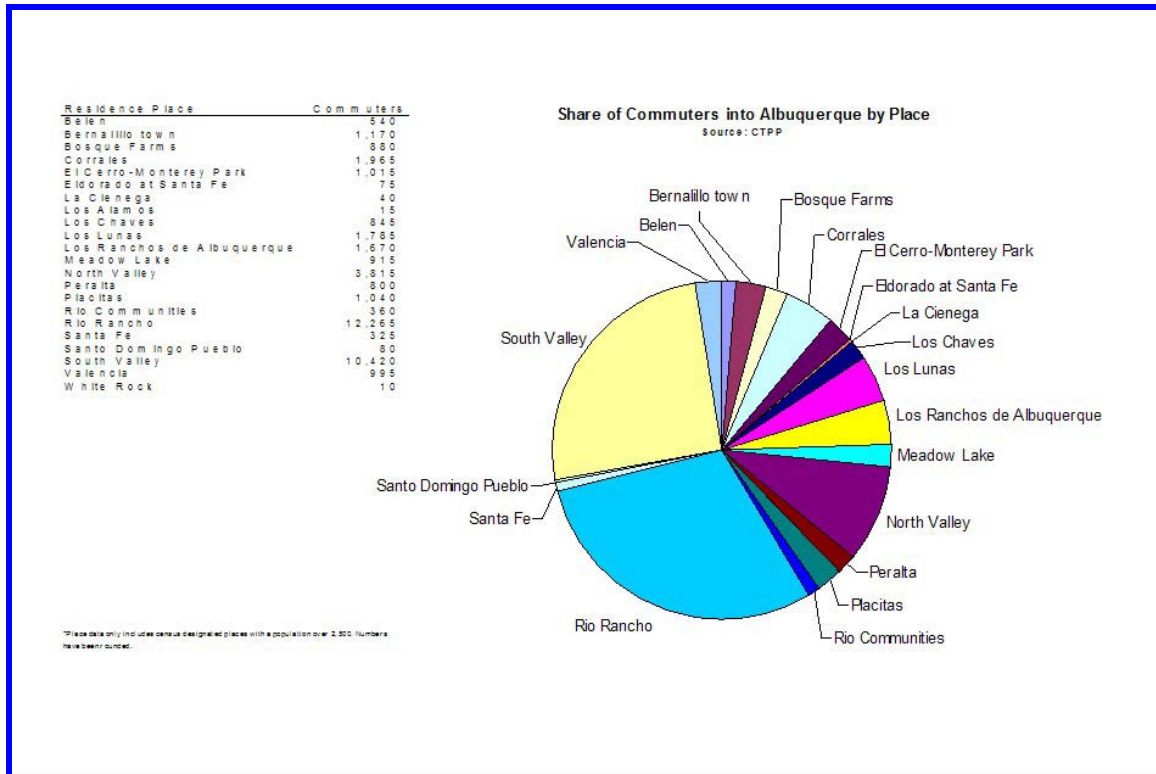
Figure 30. Trip Frequency to Albuquerque



Meanwhile, negotiations with BNSF provided The NMDOT and MRCOG with a better sense of the tradeoffs between service and capital improvements. For example, much of this corridor is single track with sidings. Service scenarios that required commuter rail trains to meet and pass each other required more extensive capital improvements than those that did not. BNSF also provided an estimate of train travel times along the corridor which was utilized to help establish service parameters. The BNSF travel time data indicated that a 45 minute travel time (including stops) could be achieved between Belen and Albuquerque, and travel times of about 22 minutes between Albuquerque and Bernalillo. In order to serve the peak periods (as defined by the survey and MRCOG traffic count data), the train travel time information was used to identify the number of trains that could reasonably run during the peak period while avoiding train meets (other than downtown Albuquerque) or severely impacting BNSF's freight operations or Amtrak's intercity rail service. Using these parameters it was determined that three trips could be made from Belen into Albuquerque during the morning peak period, and three from the north (two of which would originate in Belen and continue north to Bernalillo before making the return trip to Albuquerque). The same level of service could be provided in the reverse direction during the afternoon peak period.

In order to take these general service concepts and market information to a greater level of detail, more information was required. MRCOG obtained the next level of CTPP data in May of 2004. Figure 31 provides a summary of this information.

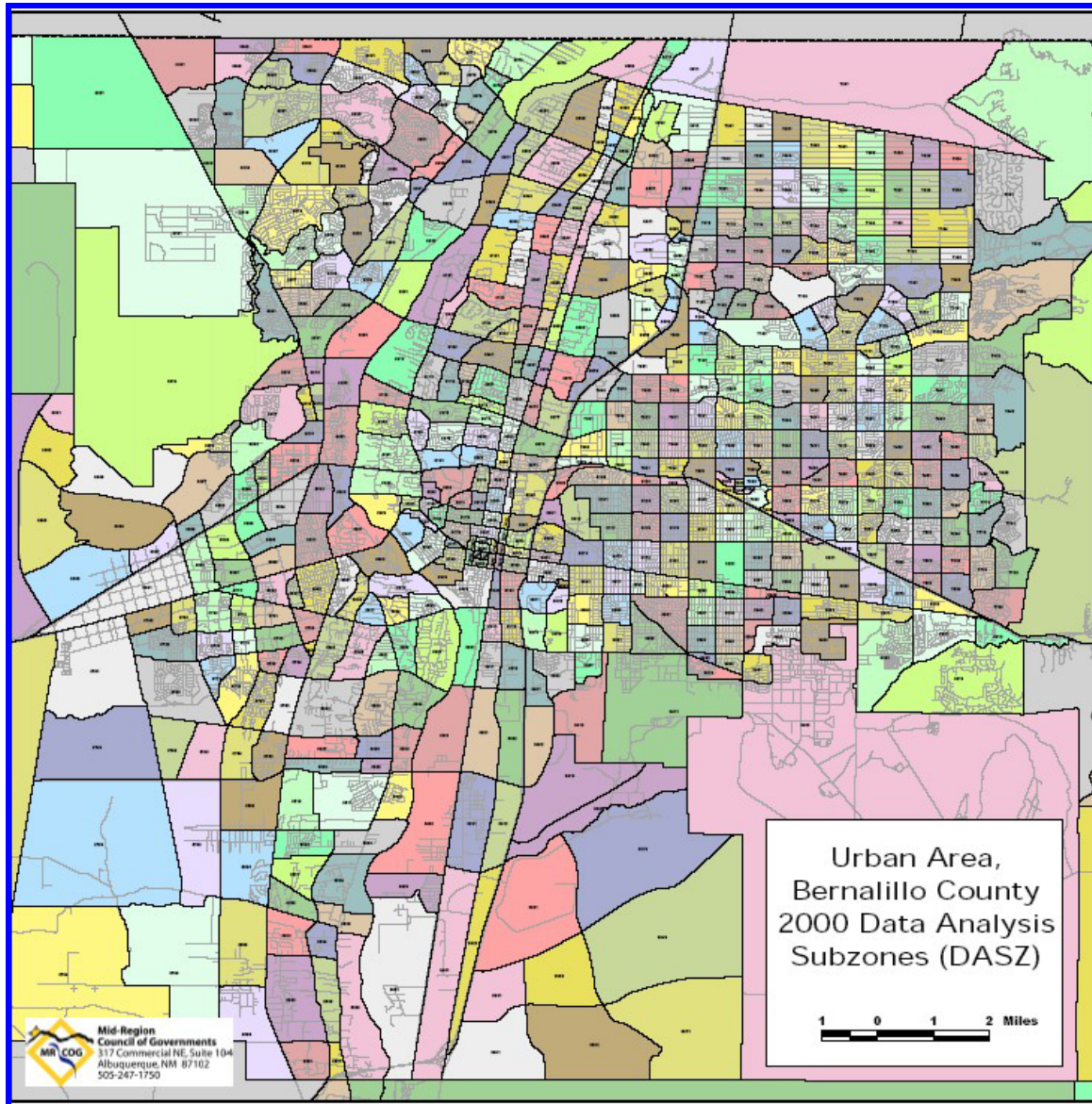
Figure 31. Year 2000 CTPP Share of Commuters into Albuquerque by Place



While the previous CTPP data illustrated County to County commute flows, this release contained data disaggregated to smaller levels of geography. The commute flows into the City of Albuquerque are illustrated for many of the communities along the line. According to the CTPP, about 1170 workers commute from Bernalillo into Albuquerque. The number for Los Lunas is about 1,750.

Another release of CTPP information had commute flows broken down into even smaller levels of geography called Data Analysis SubZones or DASZs. This level of CTPP data, which was available for the entire Phase I corridor includes commute exchanges between every single DASZ. This information provided a highly disaggregate base of commuter information to analyze very specific origins and destinations for the commuter rail service. This source data and trip tables from the MRCOG travel demand model were the primary sources of origin and destination data utilized to identify markets. Figure 32 illustrates this zone structure for the Albuquerque urban region.

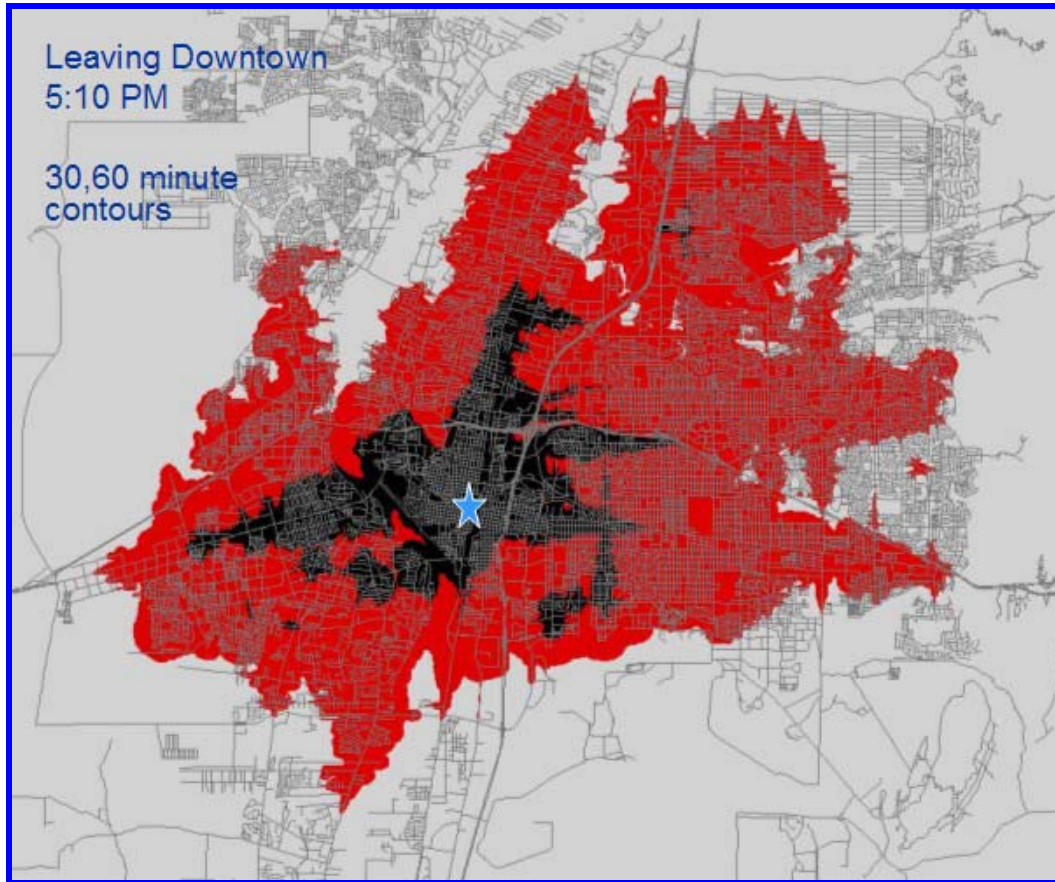
Figure 32. DASZs In The Albuquerque Urban Area



Identifying total trip markets is one piece of establishing patronage estimates. The next part involved assessing the commuter rail service scenarios and alternative connecting service configurations, to help determine what portion of the total travel market the commuter rail service could capture. To assist with this piece of work the MRCOG maintains and utilizes a highly disaggregate model to assess markets for all types of projects. This model, called the Transportation Accessibility Model or TRAM, can measure accessibility by mode of transportation or combinations of modes. It can also generate travel time contours based on real time transportation system performance by mode. For example, all the ABQRIDE bus routes and timetables are coded into the model. If the model is provided with the time of day and a trip origin, it can then generate

travel time contours at any interval for any mode (or mode combinations) from the origin outward. Figure 33 illustrates an example of this capability.

Figure 33. Travel Time Contours Based on the ABQride Bus System



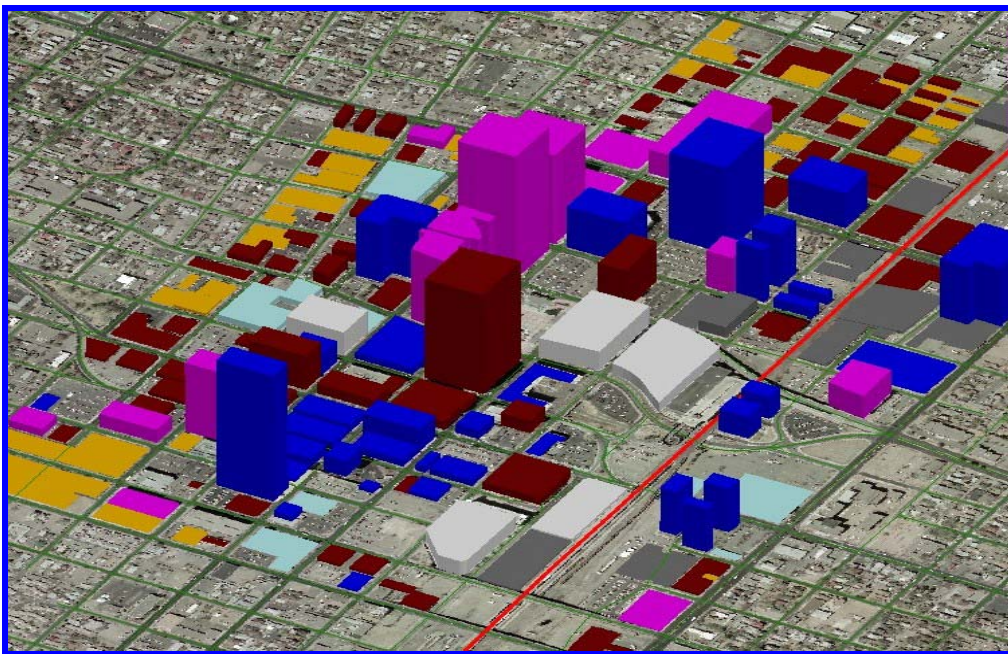
This figure illustrates the “accessibility” of destinations from downtown Albuquerque using the modes walk and bus. The black area represents how far one could get between 0 and 30 minutes, while the red area indicates how far one could get between 31 and 60 minutes. These contours can then be overlaid on Census data or future year forecasts of population or jobs for example to determine the markets that are available at different levels of accessibility e.g. population located with 25 minutes by bus from downtown Albuquerque.

To utilize this capability for the commuter rail service some modifications had to be made to the model to accommodate mode combinations involving autos and rail (to simulate park and ride). Also alternative commuter rail train schedules needed to be developed with timetables so that “real time” conditions could be simulated, like those presented in the picture above. For example, if a train leaves Belen at 6:30 a.m. and arrives in downtown Albuquerque at 7:15 a.m. it is important for the market analysis to know which destinations are within reach from the station by mode (walk, bus, shuttle). These modifications to the model were completed. The other part of this work involved

coding alternative, or new shuttle service into the scenarios (where it made sense) to better understand how the markets could change if good connecting shuttle services were available to or from the commuter rail stations. It is important to point out that ABQRIDE routes only cover a portion of the City of Albuquerque; so many stations outside of downtown Albuquerque have no fixed route, on demand, bus service today.

To identify potential markets that could benefit from better connecting services, the year 2000 Census data and MRCOG estimates of population and employment by DASZ we used. For key employment destinations these data were disaggregated further using N.M. Department of Labor data and other sources to estimate the number of employees in specific buildings. Figure 34 illustrates this information for downtown Albuquerque.

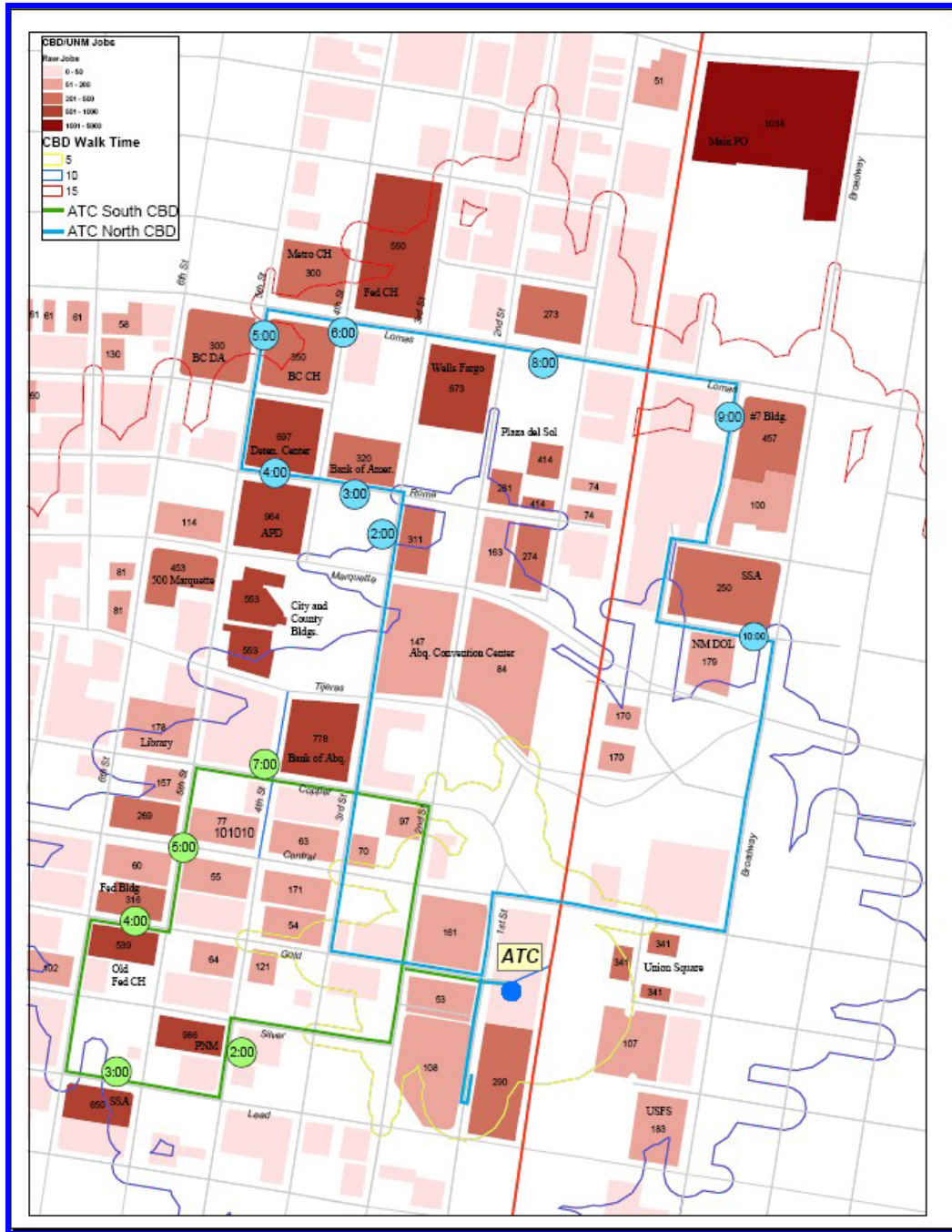
Figure 34. Employment in 3D by Block, Downtown Albuquerque



The TRAM was then used to generate walk and bus contours from stations, to determine which areas would not be accessible using the current bus system, or via a short walk. These areas were identified as potential markets for connecting shuttles.

Shuttle routes were then be coded into the TRAM to test the additional market covered. Figure 35 illustrates some test shuttle routes serving downtown Albuquerque. The shuttles are coded in with time points (time elapsed from the station). The figure also shows walk travel time contours in 5, 10 and 15 minute intervals.

Figure 35. Test Shuttle Routes in Downtown Albuquerque



Since there are multiple combinations of these alternatives that can be tested, along with multiple combinations of train schedules, a considerable amount of analysis was completed to generate alternative final service designs. This effort resulted in a focus on serving employment destinations where rail/walk or rail/bus travel times were within 20 minutes of comparable auto travel times. The focus employment destinations are illustrated in Figure 36.

Figure 36. Target Destination Markets

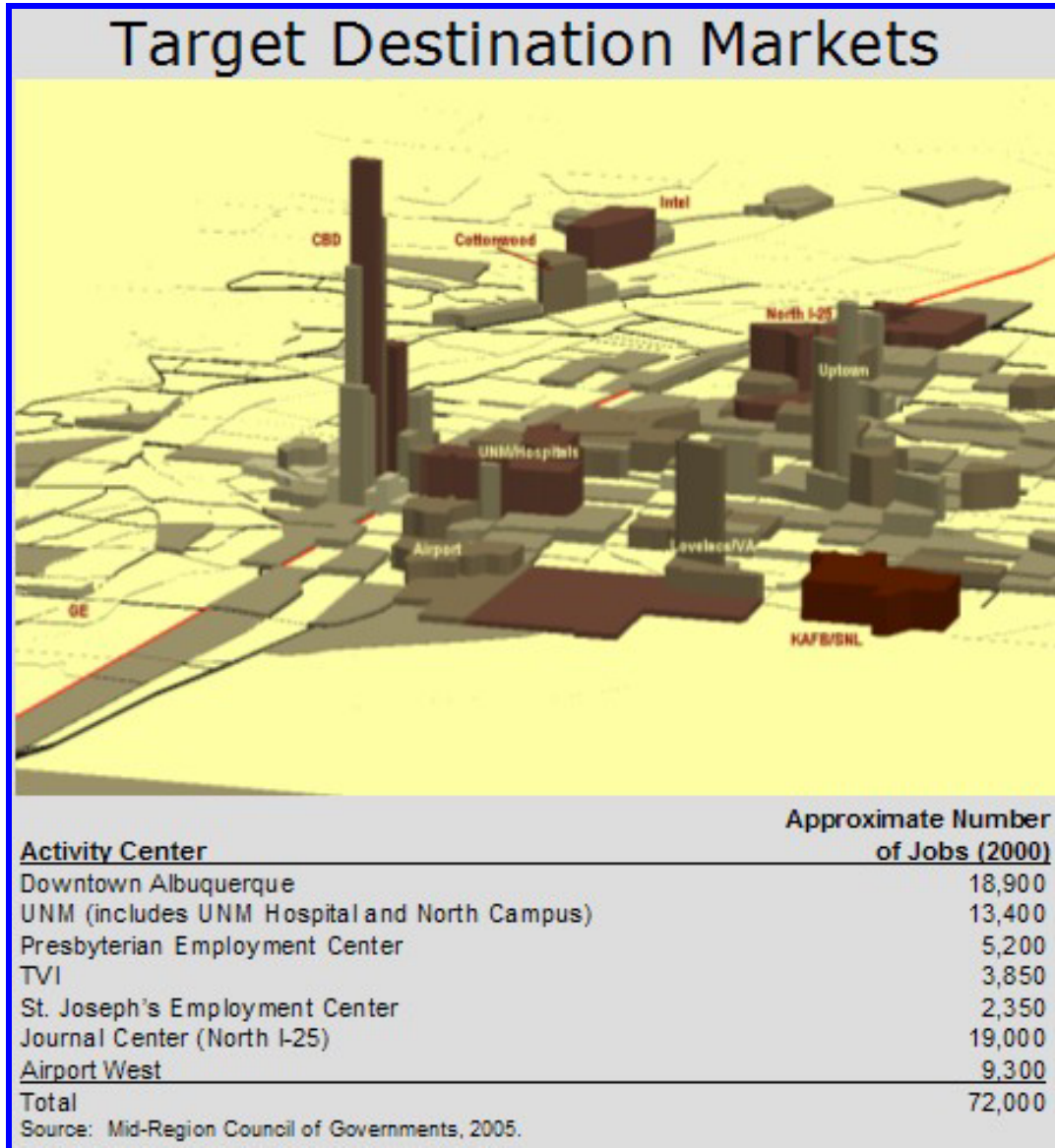


Figure 36 illustrates employment in three dimensions in the Albuquerque area. The red line running through the center of the figure is the Commuter Rail line. The table below the figure indicates how many jobs are located in each target employment cluster. The most obvious markets are those associated with Downtown Albuquerque, and the cluster of hospitals and educational institutions (UNM & TVI) just east of downtown. Together this grouping of destinations represents about 43,000 jobs. All of these destinations can be accessed from the downtown station via rail/walk or rail/bus. Most are served quite adequately by the current bus system, particularly those along Central Ave. which are served by the ABQRIDE Route 66 bus service which runs every 15 minutes **and** the Rapid Ride express bus service which also runs on Central Ave. Rapid Ride operates on 15 minute headways as well, but unlike the Route 66 service, it only stops at key destinations at approximately half mile intervals. This service, which carried over 1

million passengers in its first year of operation uses high capacity articulated buses that utilize signal pre-emption (bus drivers can activate traffic signals to generate green lights) to produce bus travel times that are comparable to auto travel times.

Figure 37 . ABQ Rapid Ride Bus



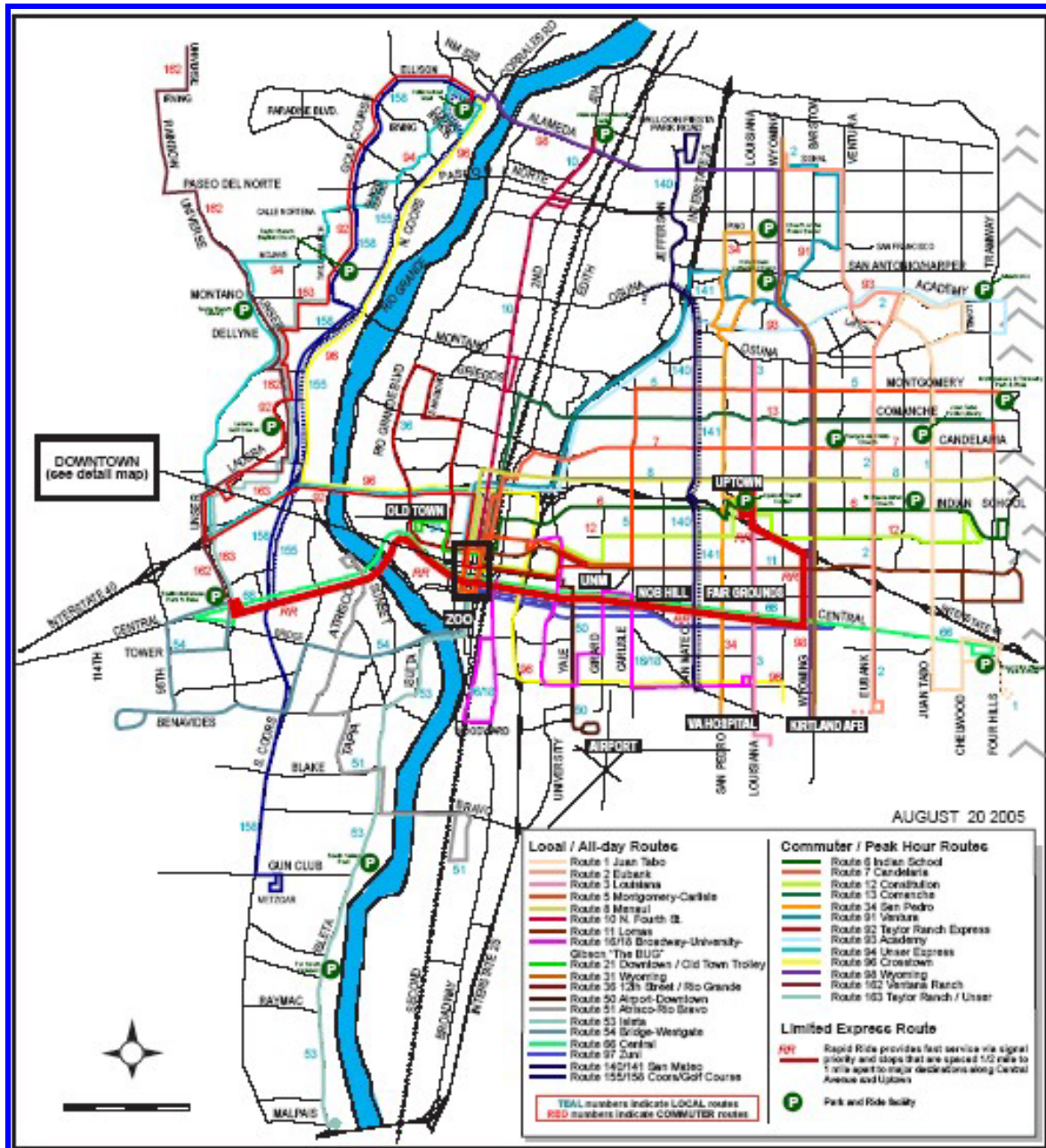
Rapid Ride serves the Central Ave. corridor from the west side of Albuquerque to Uptown with stops at key destinations like the Bio Park, Old Town, Downtown, Presbyterian Hospital, UNM, Nob Hill and Uptown. The Rapid Ride stops in Downtown Albuquerque at the Alvarado Transportation Center (ATC), literally within a couple hundred feet of the Commuter Rail platform. This service will provide connections from the Rail Runner to several of the key destinations in this corridor. A route map for the Rapid Ride service is illustrated in Figure 38 below.

Figure 38. Rapid Ride Route Map



There are many other existing bus routes that provide service from the ATC. It is the hub for a majority of ABQ Ride bus routes as depicted in Figure 39.

Figure 39. ABQRIDE System Route Map



For a complete description of ABQRIDE service (including schedules and route maps) see www.cabq.gov/transit. MRCOG staff have evaluated existing services and are not pursuing new or alternative bus routes for markets (like those along Central Ave.) that are well served by the current system. For the key destinations in the core of Albuquerque

mentioned above, there are only two that may require new bus service. They include direct service to TVI and the North UNM campus. While it is possible to get to these two destinations using existing ABQ Ride routes, the current service is not travel time competitive and in some cases does not stop close enough to key buildings. MRCOG is working with both TVI & UNM to see if this situation can be addressed. The MRCOG and ABQRide are also investigating the implementation of a couple downtown Albuquerque circulator routes to make it more convenient for employees and others to access Downtown destinations from the ATC.

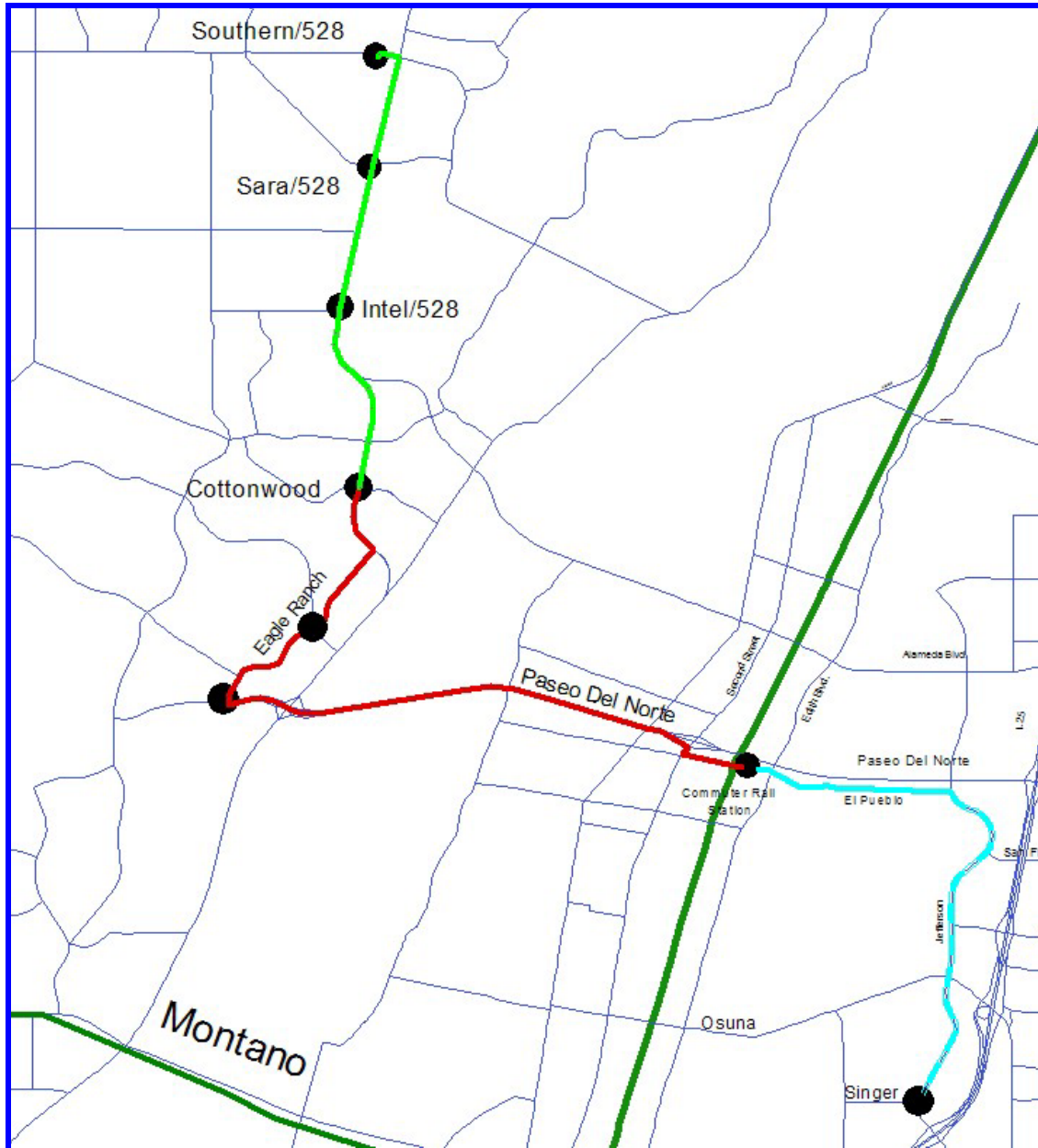
Another key and emerging destination is the Albuquerque International Airport including the job base that has emerged between I-25 and the airport centered on University Blvd. There were 9300 jobs in this area in the year 2000. This center can be served effectively from the Rio Bravo station. The MRCOG is working with the City of Albuquerque to determine if the existing shuttle system between the Airport and the Rental Car Facility on University Blvd. can be extended to the Rio Bravo station during train arrival and departure times. This would provide a connection to the Airport and several of the employment destinations in the vicinity of University Blvd.

There have also been many expressions of interest in a connection to the Kirtland Air Force Base, Sandia National Labs complex. This is a difficult destination to serve given the distance this complex is from commuter rail stations. To make a train/bus connection to this destination functional it will be necessary to have direct non-stop bus connections from the downtown station (for persons coming from the north) and the Rio Bravo Station (for persons coming from the south). It will probably also be necessary to have immediate clearance at the base gates. These service characteristics are necessary to overcome the number of transfers (car to train to bus) and the minutes and convenience lost by making these connections. To implement this kind of service it is likely that the DOE will need to address the issue of expediting bus passage through the gates, and then the internal circulation of the routes on the Base. The MRCOG will be initiating these discussions with DOE, but it may take some time to work these connections through the process.

The final employment destination of note is the Journal Center area, centered on Jefferson Avenue between Paseo Del Norte and Singer Blvd. This employment cluster had over 19,000 jobs in the year 2000 and most of it is accessible by bus within 15 minutes of the Paseo/Journal Center station. The current bus system does not provide a connection between this station and the Journal Center area, so the MRCOG and the City of Albuquerque are evaluating a new route that could serve this purpose and many more. The route under consideration is illustrated in Figure 40.

This route, if implemented in part or in full could serve multiple purposes. First, the blue portion would provide the connection from the rail station to employment destinations in the Journal Center area along Jefferson. If the route is extended across Paseo Del Norte to the Cottonwood Mall area (red portion), the route could serve the Mall from the rail station, but it would also create a bus connection from origins (households) on the Westside to and from the commuter rail station **and** destinations in the Journal Center.

Figure 40. Transit Route Serving the Paseo/Journal Center Station



If the light green portion is added to the route, bus service would be extended into Rio Rancho, making more origins accessible by bus to the rail station and Journal Center as well as creating a connection to Intel and other key employment destinations in the southern portion of Rio Rancho. ABQ Ride is in the process of generating cost estimates for providing this service.

For most of the outlying stations, there will be no transit service provided in the short term. The MRCOG will be working with these communities to identify feasible transit

services that could provide these connections as part of the Mid Region Transit District service plan development. There are a few exceptions to this situation. The Village of Los Lunas provides on demand transit services in the Los Lunas area, and the MRCOG is working with the County of Sandoval and ABQ Ride to develop a transit connection between the Sandoval County Judicial complex at Idalia Road and N.M. 528 and the U.S. 550 station.

Now that the BNSF negotiations have concluded the NMDOT and MRCOG are in the process of finalizing these transit connections, train schedules, and fare structures. As part of this process the MRCOG released a draft train schedule for public comment on January 12th 2006. The release of the draft schedule is restated in its entirety below:

Draft RailRunner Service Schedule for Public Comment

Draft RailRunner schedules are now posted for public comment. Public comment will be accepted until 5:00 pm on Thursday, February 9, 2006. Please send your comments to comment@mrcog-nm.gov or call Chris Blewett or Tony Sylvester at 247-1750.

How to read the draft schedule:

The train schedule presents northbound (Belen to the “Sandoval County / US 550” station in Bernalillo) and southbound service (Sandoval County / US 550 to Belen) separately. There are nine northbound trains each day, four of which start in Belen and five of which start in Downtown Albuquerque. Each day there are seven southbound trains, all of which start at the Sandoval County / US 550 station. The departure time for each train is listed in the row across from each station name. The times presented in the table represent both arrival and departure time since the train will stop at each station for approximately one minute. Please note that not all trains will travel the entire corridor and not all trains will stop at all stations. The stations a train will not stop at are noted with a “—”.

Initially the Railrunner will operate only on weekdays. We expect to add Saturday service within the first year of operation.

Please note that not all stations will be in operation on opening day. Information on station status will be posted on the RailRunner website and available by calling the MRCOG office closer to opening day.

Northbound Rail Runner Schedule (read down) – Monday through Friday

	Train #1	Train #2	Train #3	Train #4	Train #5	Train #6	Train #7	Train #8	Train #9
↓	Belen	---	5:45 A	6:50 A	---	1:30 P	--	---	7:30 P
↓	Los Lunas	---	6:00 A	7:05 A	---	1:45 P	--	---	7:45 P
↓	Isleta	---	6:11 A	7:16 A	---	1:56 P	--	---	7:56 P
↓	Rio Bravo / Airport	---	6:22 A	7:27 A	---	2:07 P	--	---	8:07 P
↓	Downtown Albuquerque	5:10 A	6:30 A	7:35 A	11:25 A	2:15 P	4:10 P	5:25 P	6:30 P
↓	Paseo / Journal Center	5:21 A	6:41 A	7:46 A	11:36 A	--	4:21 P	5:36 P	6:41 P
↓	Sandia	5:25 A	6:45 A	7:50 A	11:40 A	--	4:25 P	5:40 P	6:45 P
↓	Downtown Bernalillo	5:33 A	6:53 A	7:58 A	11:48 A	--	4:33 P	5:48 P	6:53 P
↓	Sandoval / US 550	5:35 A	6:55 A	8:00 A	11:50 A	--	4:35 P	5:50 P	6:55 P

Southbound Rail Runner schedule (read down) – Monday through Friday

	Train #1	Train #2	Train #3	Train #4	Train #5	Train #6	Train #7
↓	Sandoval / US 550	6:00 A	7:10 A	8:20 A	12:05 P	4:55 P	6:05 P
↓	Downtown Bernalillo	6:02 A	7:12 A	8:22 A	12:07 P	4:57 P	6:07 P
↓	Sandia	6:10 A	7:20 A	8:30 A	12:15 P	5:05 P	6:15 P
↓	Paseo / Journal Center	6:14 A	7:24 A	8:34 A	12:19 P	5:09 P	6:19 P
↓	Downtown Albuquerque	6:25 A	7:35 A	8:45 A	12:30 P	5:20 P	6:30 P
↓	Rio Bravo / Airport	---	---	---	12:38 P	5:28 P	6:38 P
↓	Isleta	---	---	---	12:49 P	5:39 P	6:49 P
↓	Los Lunas	---	---	---	1:00 P	5:50 P	7:00 P
↓	Belen	---	---	---	1:15 P	6:05 P	7:15 P

A – a.m.

P – p.m.

“---” this RailRunner train does not stop at this station.

As indicated in the previous section New Mexico can only run a limited number of trains until the second closing occurs in January of 2007. The draft schedule was based primarily on Census Journey To Work data, travel departure information from the MRCOG survey, and predominate start and end times for the major employment destinations accessible by the line and connecting transit services. This initial schedule is oriented toward commuters traveling from outlying areas to the major employment destinations in south, central and north Albuquerque discussed above. A single mid day train is also included. The schedule was designed to serve the larger commuter markets accessible by the line (and short transit connections) at predominate market departure and arrival times. MRCOG staff are also available to discuss work hours, flexible schedules with employers in primary markets. It is recognized that this draft schedule may not “work” for all trips in the corridor, hence the public review and comment period.

It is also recognized, that for certain trip destinations that are separated by considerable distance and time from the rail line, that this schedule and associated ABQRIDE bus routes will not produce a total trip travel time that is competitive with most auto travel times. This schedule represents the beginning of a new mode of transportation in the

corridor. Because of costs and other factors it is not possible to serve all major transportation origins and destinations by rail and connecting transit services overnight. It took decades to develop the roadway/auto based transportation system that exists today. It takes time and resources to introduce new modes and connections and grow a public transportation system that can effectively provide choices to a majority of trip markets in a large urban area. This rail line represents a substantial step in this direction.

Work is almost complete on establishing a fare policy for the service. The MRCOG commissioned a survey through Research & Polling Inc. to gather additional information about fare price sensitivity, schedules and awareness of the commuter rail project and other information including: Perceptions of the adequacy of the current transportation system in the Albuquerque Metro area, identification of the most effective messages to encourage ridership of the proposed rail system and identification of factors most important to commuters when considering whether to use public transportation.

The data was collected by phone interviews conducted in the latter part of June 2005. A total of 1,250 adult individuals completed interviews including 500 Albuquerque Metro area adult residents; 375 Valencia County adult residents who commute to certain employment clusters in Albuquerque for school and/or work and 375 Southern Sandoval County adult residents who commute to certain employment clusters in Albuquerque for school and/or work. The Albuquerque Metro sample size of 500 at a 95% confidence level provides a maximum margin of error of 4.4%. In theory, in 95 out of 100 cases, the results based on a sample of 500 will differ by no more than 4.4 percentage points in either direction from what would have been obtained by interviewing all Albuquerque Metro area adult residents. The Valencia County sample size of 375 and southern Sandoval County sample size of 375 at a 95% confidence level each provide a maximum margin of error of 5.1%. In theory, in 95 out of 100 cases, the results based on a sample of 375 will differ by no more than 5.1 percentage points in either direction from what would have been obtained by interviewing all Valencia County and southern Sandoval County area adult residents.

Some of the more interesting findings of the survey include a high level of support for the project among all survey respondents including the sample from the Albuquerque urban area as depicted in Figure 41.

The mean score of 4.2 suggests that there is a great deal of public support for Commuter Rail and an improved bus system in the region.

The survey asked residents in Valencia and Sandoval counties about travel characteristics associated with their commutes into Albuquerque. Characteristics of interest included travel times, distance, cost, frequency, time of day etc. Figure 42 below illustrates their responses to the cost of gas associated with the commute.

Figure 41. Support For Public Transportation Among Albuquerque Residents

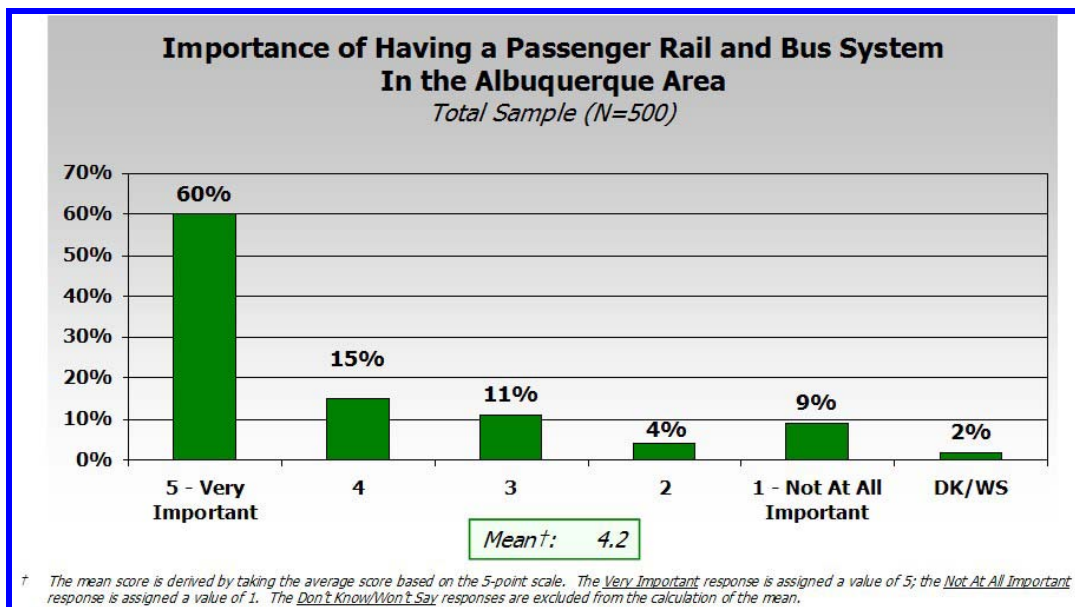
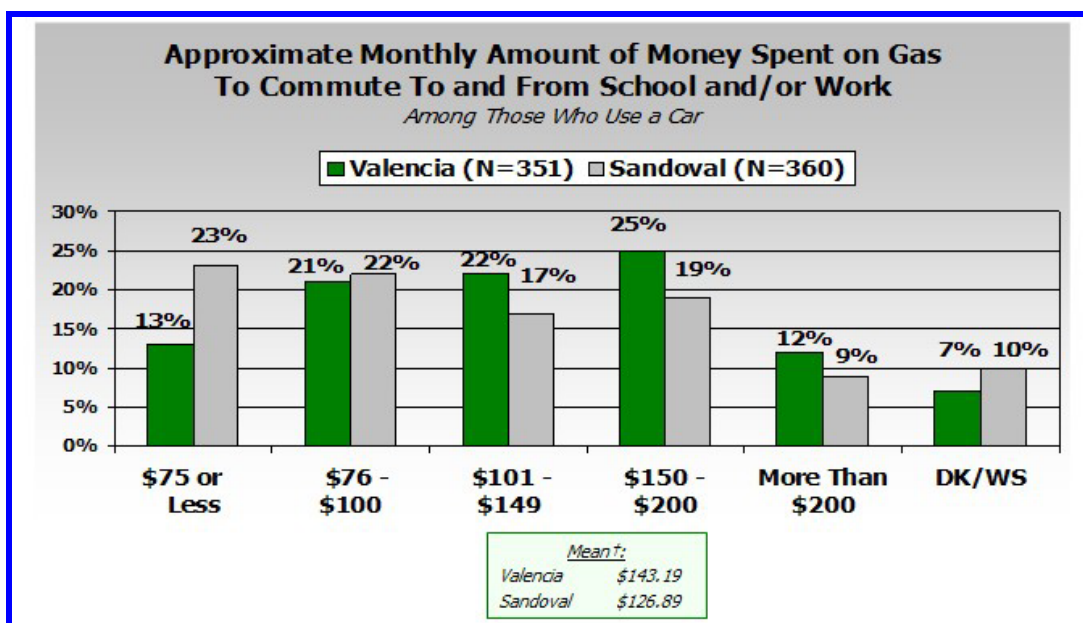


Figure 42. Monthly Commute Costs from Valencia & Sandoval Counties to Albuquerque



The data from this question indicates that on average Valencia County commuters are spending about \$143.00 and Sandoval County commuters are spending about \$127.00 on gas per month to commute to Albuquerque. The survey was completed when the price of gas was in the range of \$2.19 a gallon. Note that other auto related expenses (insurance, depreciation, and maintenance) are not included in these costs.

Respondents were also asked to identify how much they would be willing to pay to ride the commuter rail. Figures 43 & 44 illustrate the responses to these questions.

Figure 43. Price Willing To Pay For A One Way Ticket On The Commuter Rail

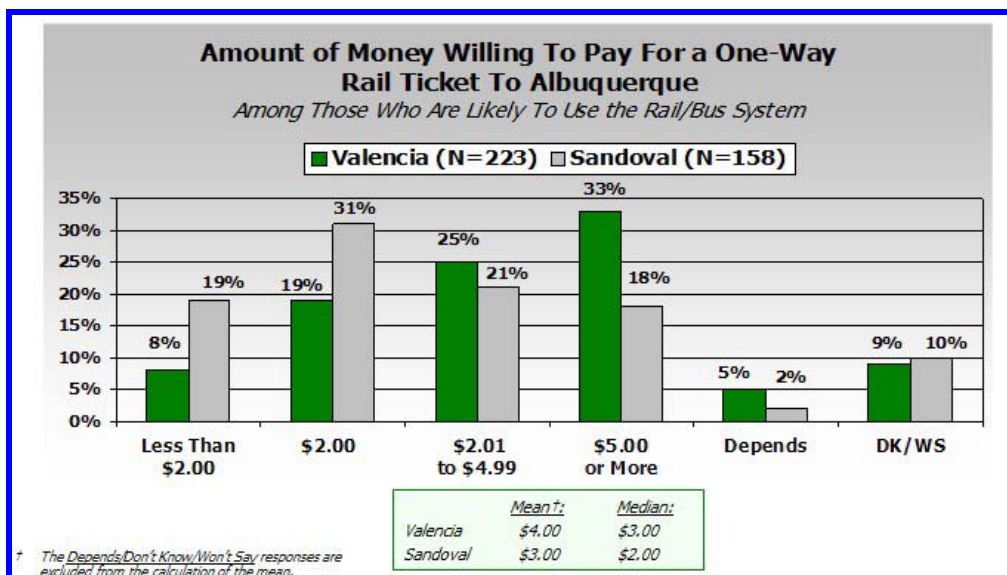
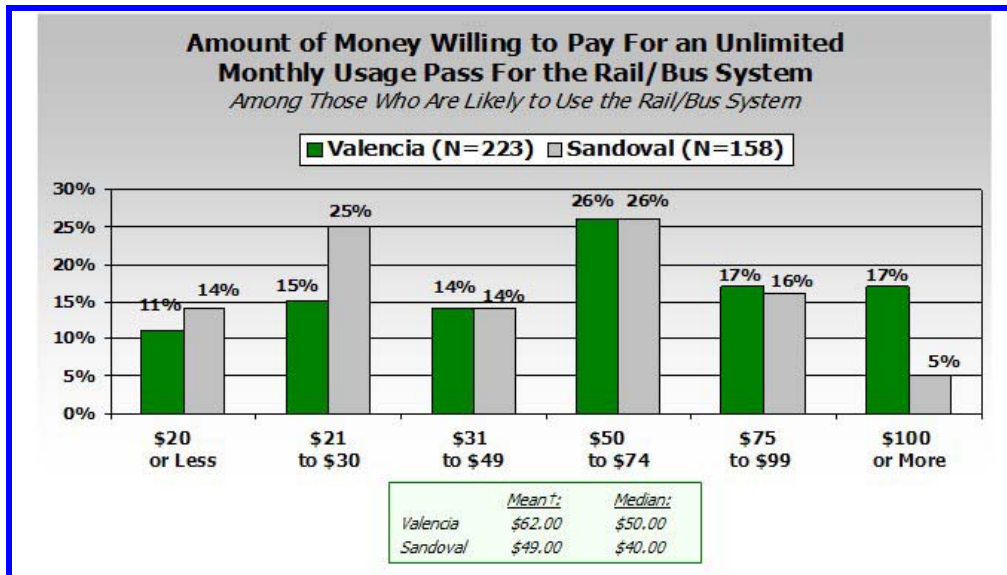


Figure 44. Price Willing To Pay For A Monthly Pass On The Commuter Rail



The data indicate that on average Valencia and Sandoval County commuters are willing to pay between \$3.00 and \$4.00 for a one way ticket and \$49.00 and \$62.00 for a monthly pass. Data from these questions and others were utilized to formulate a fare policy for the Commuter Rail service.

There were a number of other issues that were considered before finalizing a fare policy. They included, determining what fare categories should be offered, evaluating alternative fare structures, (zone based and Flat Fee) and other features that are standard in most commuter rail fare policies (e.g. discounts for seniors and children, discounted multi-ride tickets, annual passes and bus transfers).

The easiest fare system to administer is a flat fee regardless of fare category. Since this commuter rail service will eventually grow to a system that could reach 100 miles in length, a flat fee would either greatly favor those traveling longer distances or have serious cost implications (and thus patronage issues) for those riders traveling only a short distance. This is one of the reasons that very few commuter rail operations utilize a flat fee structure.

The most equitable systems (the cost is proportional to the distance) are zone based fares. These structures are more commonly used because fares can be based on distance traveled, so users traveling shorter distances pay less than those that are traveling further. To simplify the structure, and make the fare system easy for users to understand, zones are typically established which include groups of stations as opposed to calculating fares from station to station.

After due consideration of a number of these factors, and a review of fare structures in place at other commuter rail operations a zone based structure with a variety of fare categories was developed. Since service will ultimately be extended to Santa Fe the zone base system needed to anticipate this portion of the service. Zone based systems consisting of four and five zones were evaluated. The four zone system was chosen because it represents the most equitable division of station groupings relative to distance traveled and it will be easier for users to understand.

This system, and proposed fare structures is described below. Note that this fares for the Zone system which will not go into effect until January of 2007 have not been finalized. In the interim the service will be free from the start up date until June 30 2006, and then for the remaining months of 2006 a flat fare will be charged. This approach will allow users to try out the system for a fairly low cost. It is also likely that once service starts there will be some logistical issues that will arise, and from a customer service perspective it makes sense to give users a reduced fee while service hiccups are worked out. The pricing for zone to zone travel was based primarily on the survey results, the distances involved and competing auto costs which for these purposes was based primarily on the cost of gasoline.

**New Mexico Rail Runner Express Fare Policy & Structure
January 2006**

WAIVED FARE INTRODUCTORY SERVICE

Effective Dates: Beginning of Service through June 30, 2006

Fare Levels: Free

Ticket Options: None

DISCOUNTED SERVICE: \$2 FLAT FARE

Effective Date: July 1, 2006 through December 31, 2006

Ticket Options:

One-way Ticket – travel from one station on the line to another station.

Day Pass – unlimited travel for day.

10 Day Pass – a book of ten Day Passes for unlimited travel anytime
(not necessarily consecutive days).

Monthly Pass – unlimited travel for the month.

Annual pass – Unlimited travel for one year.

Family pass – under consideration

Fare Categories:

	Full Fare	Reduced Fare	Free	Group, etc
Included:	Adults 18 - 64	Seniors 65+ Children 3 - 17 Disabled	Children under 3	TBD

Fare Levels:

	Full Fare	Reduced Fare (Senior / Child / Disabled)
One-Way	\$2	\$1
Day Pass	\$4	\$2
10 – Day Pass	\$25	\$12
Monthly Pass	\$50	\$20

PERMANENT ZONE BASED FARE STRUCTURE

Effective Date: January 1, 2007 through December 31, 2007

Ticket Options: same as Discounted Service options

Fare Categories: same as Discounted Service options with Annual Pass

4 Zone Fare Structure								
Full Fare								
Number of Zones Traveled	1 Way	Day Pass	10 Day Pass	Monthly Plus Pass	Annual Pass		Monthly Pass average daily cost*	Monthly Savings
1 Zones	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
2 Zones	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
3 Zones	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
4 Zones	TBD	TBD	TBD	TBD	TBD		TBD	TBD
Reduced Fare								
Number of Zones Traveled	1 Way	Day Pass	10 Day Pass	Monthly Plus Pass	Annual Pass		Monthly Pass average daily cost*	Monthly Savings
1 Zones	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
2 Zones	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
3 Zones	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
4 Zones	TBD	TBD	TBD	TBD	TBD		TBD	TBD

Fare Levels: Fares will be based on the number of zones travel takes place within and are provided below. The number of zones will be increased when service extends to Santa Fe.

Zone Composition:

Zone A	Zone B	Zone C	Zone D
<i>Belen</i>	<i>Isleta Pueblo</i>	<i>Downtown Bernalillo</i>	<i>Downtown Santa Fe</i>
<i>Los Lunas</i>	<i>Rio Bravo / Airport</i>	<i>Sandoval / US 550</i>	<i>South Capital</i>
	<i>Albuquerque Downtown</i>	<i>Other Stations To Be Determined</i>	<i>Other Stations To Be Determined</i>
	<i>Paseo / Journal Center</i>		
	<i>Sandia Pueblo</i>		

The zone groupings were based primarily on travel markets and distances from the Downtown Albuquerque station which is the primary destination for this first phase. The Isleta and Sandia stations are almost equidistance from the Downtown station (about 9.5 miles) and the next stations beyond these two are a considerable distance from these stations. It was important to insure that the zone boundaries would not encourage users to drive forward to the next station to avoid a more expensive fare. The Los Lunas station is

11 miles from the Isleta station and the Bernalillo station is 7 miles from the Sandia station which ought to provide a deterrent to this kind of behavior.

Operations

The MRCOG and NMDOT released an RFP in February of 2005 for a contract service operator, vehicle and locomotive maintenance, maintenance of way and several other elements that may be required for providing ongoing service. The RFP closed on April 1st and a selection of the highest rated firm was made in late May. The MRCOG and the NMDOT signed a contract with the highest rated firm, Herzog Transit Services Inc. Herzog currently provides commuter rail services in Dallas, Miami, and San Jose. Herzog is responsible for crewing and operating the trains, maintaining the equipment and rights of way and constructing some of the capital improvements required for Phase I service. Herzog has actively engaged in a number of activities in preparation for assuming these responsibilities. They have established a local office in Albuquerque at Iron Street and Broadway Blvd. adjacent to the proposed maintenance facility. They have been recruiting and hiring for positions related to the operations and maintenance activities. Herzog will employ approximately 30 people for Phase I operations and maintenance activities. They expect to fill 22-25 of these 30 positions with local labor.

Public Involvement

This project has generated a great deal of public interest. To accommodate this interest and to keep interested parties aware of the status of the project the NMDOT and the MRCOG developed a public involvement/awareness plan. There are three main components of this plan. One is to provide briefings to groups or associations on the status of the project. Another is to provide information to media outlets (print, radio, TV) and maintain a current status report on the Rail Runner website (www.nmrailrunner.com). The final component consisted of a series of public meetings organized around station sites in the communities along the line.

MRCOG has already provided a number of briefings to various groups and associations. The list below provides a sample of these groups.

N.M. Institute of Traffic Engineers
Amtrak Local Union Representatives (Engineers/Conductors)
American Society of Civil Engineers, New Mexico
American Society of Professional Engineers, New Mexico
New Mexico Board of Realtors
Economic Forum of Albuquerque
Urban Council of Albuquerque
Santa Fe Rail-yard Board of Directors
University of New Mexico Transportation Committee
New Mexico Economic Development Department Staff
Rio Communities Homeowners Association
Santa Fe Kiwanis Club

Mountain View Neighborhood Association
American Association of Retired Persons of Los Lunas
Belen Chamber of Commerce
Downtown Albuquerque Open House (Alvarado)
House Transportation Committee
Sierra Club Land Use & Transportation group
League of Women Voters
Friends of the Cumbres & Toltec Railroad
Belen Rotary Club
NAIOP/New Mexico Homebuilders
Albuquerque Hispano Chamber of Commerce Board of Directors

In addition the NMDOT and the MRCOG have provided briefings and presentations on the project to elected officials and government agencies. The list below provides a sample of these groups.

Valencia County Commission
Mayor Delgado & Staff City of Santa Fe
New Mexico Congressional Delegation & Staff (Wash. D.C.)
Santa Fe County Commissioners & Staff
Federal Railroad Administration (Regional)
Federal Transit Administration (Regional)
Congresswoman Heather Wilson
Santa Fe MPO Policy board
New Mexico Transportation Commission
Governor Paisano Sandia Pueblo
New Mexico Finance Authority Legislative Over-sight Committee
New Mexico Legislative Finance Committee
Santa Ana Pueblo Enterprise Board

The MRCOG has also provided regular briefings on the project to its standing boards and committees which contain staff and elected officials from the four county area covered by the MRCOG. And as noted earlier the MRCOG formed a Commuter Rail Task Force that includes elected officials from the following communities:

City of Belen
Village of Los Lunas
Valencia County
Bernalillo County
Sandoval County
City of Albuquerque
City of Rio Rancho
Village of Los Ranchos
Town of Bernalillo

There have been a number of stories in the print media on the commuter rail project over the course of the last year and a half. This includes the Albuquerque Journal, the Albuquerque Tribune, the New Mexican, and the Valencia County News-Bulletin. In addition, Governor Bill Richardson held a press conference in February of 2004 at the Alvarado Transportation Center to describe the project status and schedule. This event, which included a demonstration ride up the line to Bernalillo and back, was well attended by elected officials throughout the corridor. Press Conferences were also held in September of 2005 when the first car arrived in Albuquerque, October of 2005 when the first locomotive arrived, November of 2005 for the U.S. 550 Station groundbreaking and in December of 2005 when agreements were signed with the BNSF. More are planned in the near future for events associated with service start up.

A series of public open houses were held in the various communities along the line to provide information on the commuter rail project and to solicit public comment and feedback on many elements of the commuter rail project including the service design, station design, station accessibility, fares, amenities etc. Meetings were held in September 2004, for Belen and Los Lunas, February 2005 for the Alvarado Station Site and October & November 2004 for the remaining station sites and adjacent communities.

Figure 45. Los Lunas Open House



Commuter Rail Project Status Phase II (Alternatives Analysis)

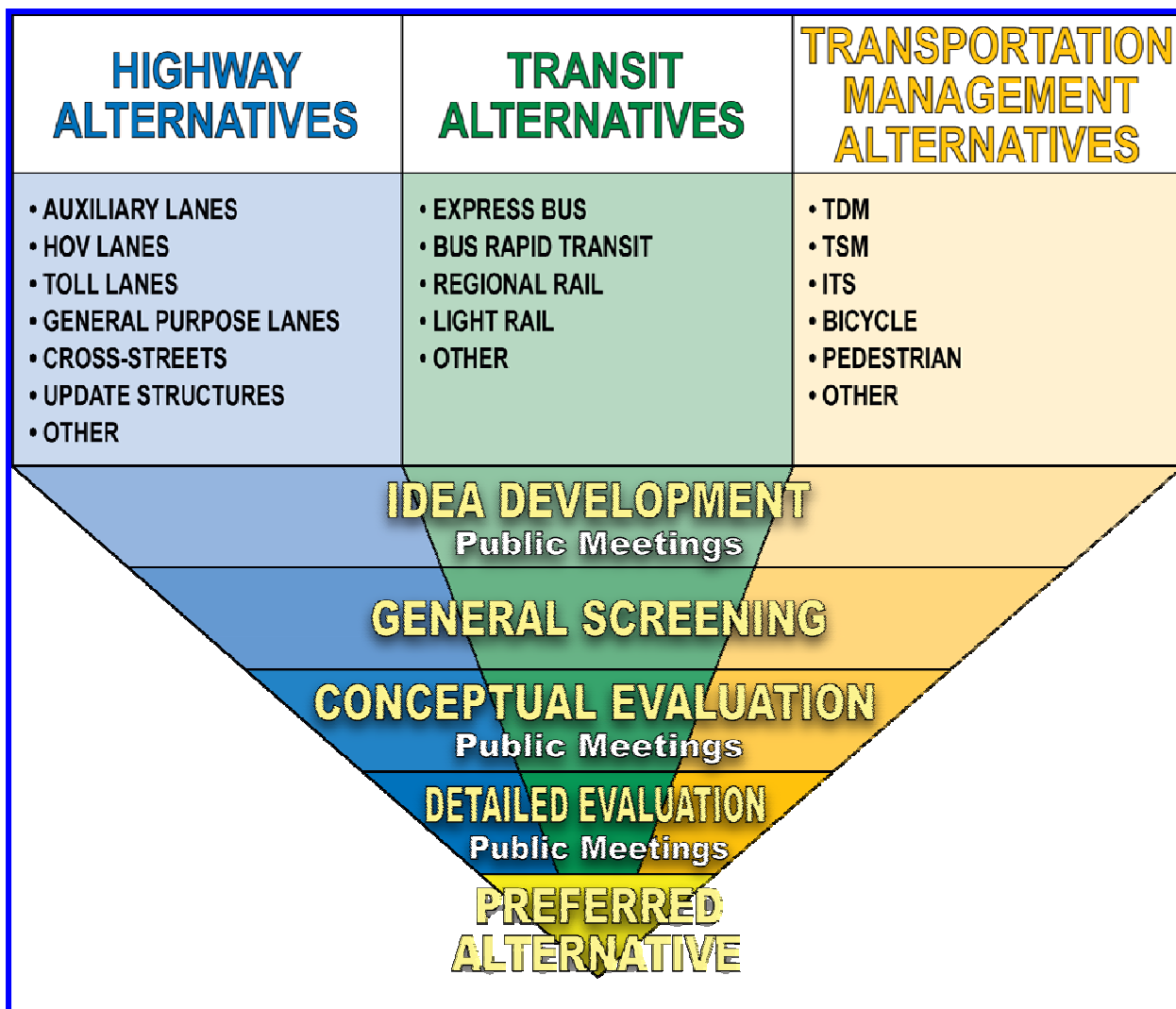
The approach to implementing Commuter Rail between Bernalillo and Santa Fe is driven in large part by the pursuit of Federal New Starts (exempt) funding for a portion of the capital costs. In order to qualify the project for this funding category, the new starts process must be followed. The steps in the new starts process are as follows:

1. Complete a scoping report for the corridor and transmit the report to the Federal Transit Administration (FTA) for comment. The scoping report should include a problem statement that identifies transportation related issues in the corridor, it should also describe alternative solutions that will be investigated and identify ways the performance of the alternatives will be measured.
2. Once a scoping report is accepted by the FTA an Alternatives Analysis can be initiated. The Alternatives Analysis is typically a nine month to one year endeavor. Alternatives that may solve or address transportation issues in the corridor are analyzed at a level sufficient for State and Local officials to identify a locally preferred alternative. This analysis is multi-modal by design, and includes not only rail alternatives, but also roadway, park and ride and transportation system management (TSM) alternatives. Alternatives must be evaluated in sufficient detail, on a number of different levels (e.g. cost, environmental affects, cultural and historical affects, benefits, economic development affects, safety etc.) to provide a sound basis for deciding on a locally preferred alternative.
3. Once an Alternatives Analysis is completed, the locally preferred alternative may then be advanced into the Environmental and Preliminary Engineering process. The level of effort required at this stage is based on the anticipated environmental consequences of implementing the locally preferred alternative. Typically the choice is between an Environmental Assessment (EA) and an anticipated FONSI (finding of no significant impact) or an Environmental Impact Statement (EIS) and a ROD (Record of Decision). This step will take between 12 and 18 months to complete.
4. Once environmental clearance is obtained for the preferred alternative, FTA may authorize Final Design and Rights of Way acquisition, and ultimately construction.

The NMDOT and the MRCOG prepared and submitted the required scoping report to FTA in June of 2004. FTA provided comments on the scoping report back to the NMDOT and the MRCOG. The NMDOT and the MRCOG initiated the Alternatives Analysis in October of 2004. URS Griener was retained by the NMDOT and the MRCOG to assist with the development of the Alternatives Analysis report. Two public meetings were held (one in Santa Fe and one in Bernalillo) at this time to solicit input on the types of alternatives and technologies that should be considered in the Alternatives Analysis and to provide a forum to explain the process associated with the development

of an Alternatives Analysis. A conceptual view of the Alternatives Analysis process is illustrated in Figure 46. Basically, a variety of transportation solutions and strategies are developed at the beginning of the Alternatives Analysis. These solutions include Highway Alternatives (the addition of general or special purpose lanes), Transit Alternatives including rail and express bus and Transportation Management Alternatives including Intelligent Transportation Systems (ITS) and Travel Demand Management (TDM) programs.

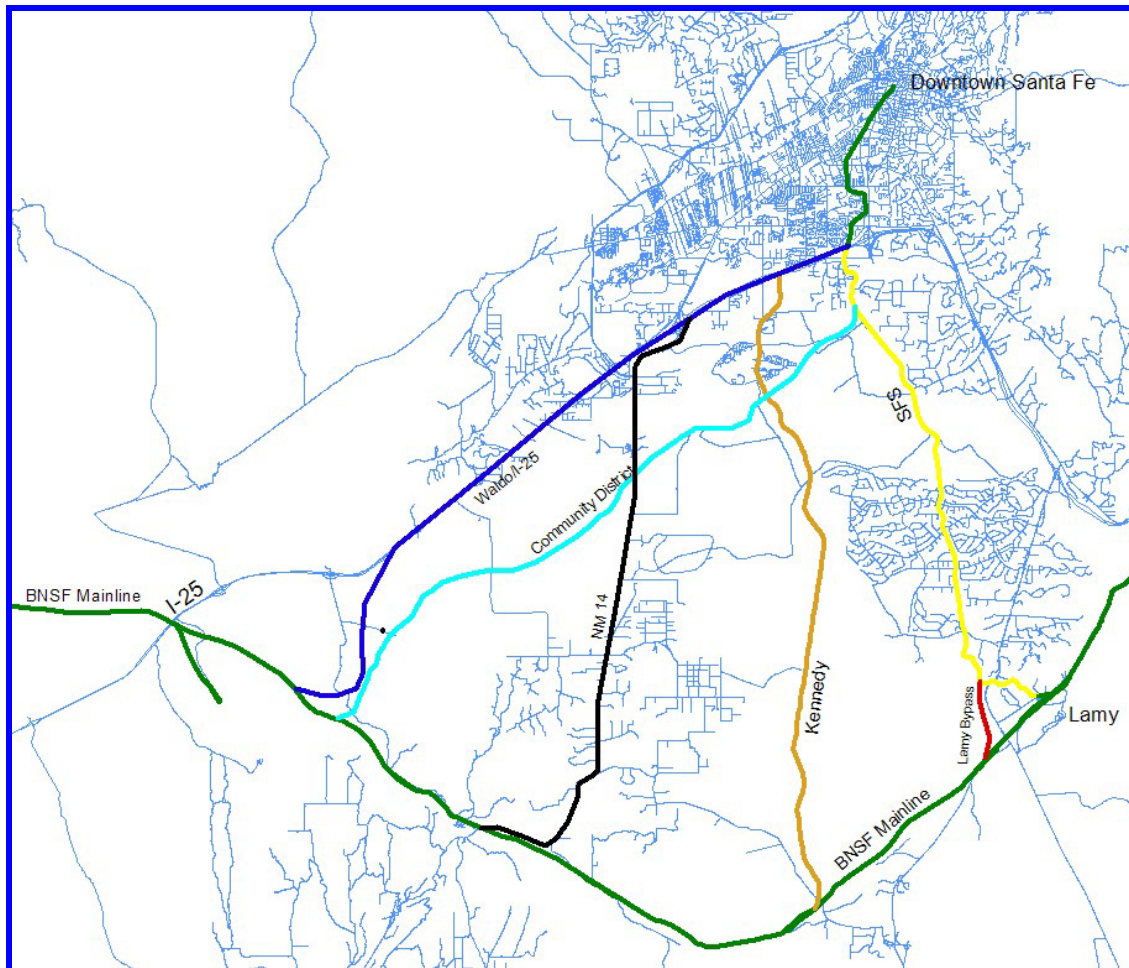
Figure 46: Alternatives Analysis Process



Note that alternatives can be developed which include elements from more than one of these categories like Express Bus on HOV lanes. As the Alternatives Analysis proceeds the goal is to screen alternatives, first at a general level, then at a conceptual level and then finally through a detailed evaluation. Alternatives are eliminated as the process moves forward based on increasingly detailed criteria.

After the initial round of public meetings a range of alternatives were developed and subjected to the general screening process. The rail alternatives included in the general screening are depicted in Figure 47 below.

Figure 47. Rail Alternatives Considered in the Alternatives Analysis



All of the rail alternatives considered would utilize the existing BNSF line (shown in green) which runs north out of Albuquerque and crosses I-25 at the base of La Bajada hill. From this point the alternatives diverge from the BNSF mainline at various points to the east and then converge in the vicinity of the existing Santa Fe Southern (SFS) line and I-25. All of the rail alternatives would then utilize the existing SFS Line from I-25 into Downtown Santa Fe (this portion of the SFS line is also green). The Waldo/I-25 alternative depicted in blue diverges from the BNSF mainline just east of I-25, and then rejoins the I-25 alignment at the top of La Bajada hill. It then follows the I-25 alignment until it reaches the point where the SFS crosses I-25. The Community District alternative also diverges from the BNSF mainline just east of I-25. It then proceeds through the Waldo Canyon area and then parallels I-25 until it intersects with the SFS line. At this point the SFS line would be utilized into downtown Santa Fe. The NM 14 alternative

diverges from the BNSF mainline at Cerrillos and then follows the NM 14 road alignment to I-25. It would then follow I-25 to the SFS and utilize the SFS line into downtown Santa Fe. The Kennedy alternative follows the old New Mexico Central railroad line. The old railroad bed is still visible in many places along this alignment (the tracks were dismantled in 1929) which diverges from the BNSF mainline near the old town of Kennedy and proceeds north through the Santa Fe Community College to I-25. It would then follow the I-25 alignment to the SFS rail line. The SFS line would then be utilized from I-25 into downtown Santa Fe. The final rail alternative considered would diverge from the BNSF mainline at the Lamy bypass (in red) and then utilize the existing SFS alignment into downtown Santa Fe. Unlike the other alternatives the SFS alignment is an active railroad today. However, the track is very old and vertical curves and structures limit train speeds to a maximum of 20 mph.

A second round of public meetings were held in February of 2005 in both Bernalillo and Santa Fe to review details of the conceptual level of screening and to solicit comments on those alternatives being carried forward into the detailed level of analysis. After the conceptual level of screening all but two of the rail alternatives were eliminated. Only the SFS (with the Lamy Bypass) and the Community District alternative were carried into the detailed evaluation of the alternatives (along with BRT, HOV and general purpose lanes alternatives).

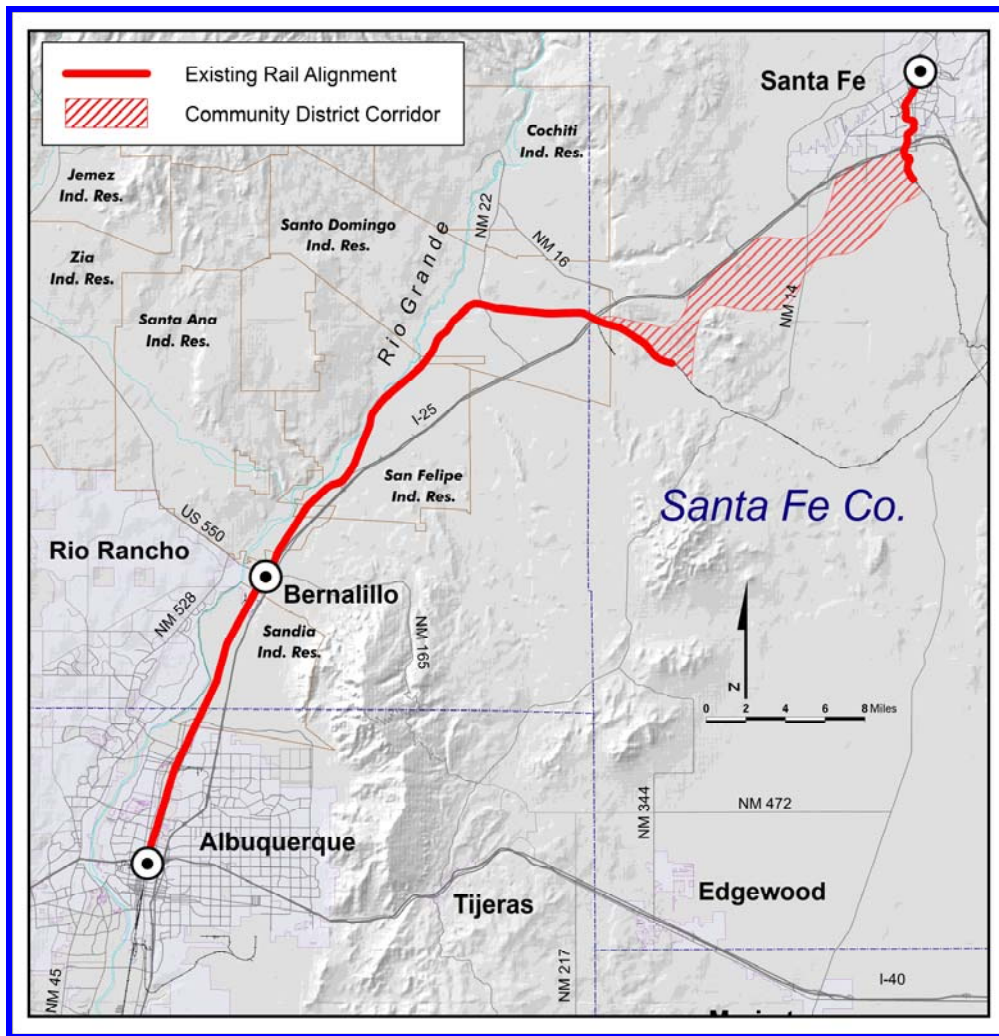
After another round of public involvement in August 2005, the detailed evaluation of the remaining alternatives was completed in September of 2005. The analysis includes an evaluation of costs, markets, ridership, accessibility, land use, general environmental conditions, feasibility, travel times and other factors. The end result of this analysis was series of recommendations including the selection of the Community District commuter rail alternative as the Locally Preferred Alternative or LPA. Travel times for this alternative between downtown Albuquerque and downtown Santa Fe are estimated to be in the range of one hour and twenty minutes. The 2008 capital cost of this alternative is estimated at \$240 million. Prior to the Alternative Analysis Study capital costs for this portion had been estimated in the range of \$200 - \$250 million. Year 2025 weekday ridership forecasts for the Community District alternative are estimated at 3,000. This forecast does not include all trip purposes in the corridor, nor does it include work trips in the Santa Fe region commuting to jobs in Santa Fe. These elements will be included in the modeling for the environmental phase. The Alternatives Analysis report, which is available on line at www.nmrailrunner.com, also recommends that safety, Intelligent Transportation System (ITS) and minor capacity improvements be implemented on I-25 between Albuquerque and Santa Fe.

The Alternatives Analysis report includes a number of other findings related to transportation issues in this corridor. If no transportation improvements are made in this corridor, a one way peak hour auto trip between downtown Albuquerque and Downtown Santa Fe will take about **two and half hours** in the year 2025. It will cost about \$280 million to add a lane in each direction on I-25 between the Big I in Albuquerque and the St. Francis exit in Santa Fe. This does not include the \$40 million cost to add an extra lane between Bernalillo and Tramway which is currently programmed. If this is added in,

the total cost would be \$320 million. Adding this extra lane will produce a year 2025 one way peak hour travel time between downtown Albuquerque and downtown Santa Fe of **one hour and fifty minutes**. This travel time assumes no delays due to crashes, roadway construction and maintenance or poor weather.

The final report was submitted to FTA in September of 2005. The NMDOT and the MRCOG have since initiated the next step in the process which is to conduct the additional planning, environmental and engineering work on the Community District corridor. An RFP was released in October of 2005 for this next phase of work. Firms were selected to assist in five key areas; Public Involvement, Preliminary Engineering, Environmental, FTA New Starts and Travel Demand Modeling and Planning. This work will focus on a much more detailed analysis of the corridor and establish with great specificity an actual alignment, station locations, rolling stock requirements, environmental mitigation and avoidance, ridership estimates, costs, schedules etc.

Figure 48. Community District Corridor



The starting point for all this work will include a more thorough investigation of alignments for the new rail in the portion of the corridor where a rail line does not exist. This portion is represented by the hatched area in Figure 48. This next stage will also investigate the feasibility of a direct commuter rail connection to the Albuquerque International Airport.

It is anticipated that the environmental and engineering phase of the study will take about a year to complete. After this step is completed the final design of the line, stations and other features will be undertaken. This will be followed by the acquisition of rights of way, and then the project would enter the construction phase. It is estimated that final design on an accelerated schedule could be completed in seven to nine months, and construction will take approximately a year.

Commuter Rail Project Financials

In the summer of 2004 an initial budget of \$75 million was established for Phase I capital costs. This figure was arrived at by NMDOT and the MRCOG utilizing information from a number of sources. Track, signal and crossing improvements estimated at \$30 million came primarily from negotiations with the BNSF, and were based on the level of improvements required to run commuter rail service without adversely impacting their freight operations. This estimate was based on the State leasing the line from the BN&SF and not on an outright purchase. The NMDOT and the MRCOG also had HDR review cost estimates from the BN&SF to insure that they were in line with comparable railroad improvements.

In December of 2005 The Sandoval County Commission approved \$10 million for the commuter rail project to assist in the acquisition of rolling stock, track and signal improvements in Sandoval County and to provide additional resources for Station Development in Sandoval County. These funds have been utilized to add additional value in these areas. The Sandoval County Commission also approved an additional \$6 million to provide for connecting transit services in Sandoval County.

The acquisition of rolling stock (engines and passenger cars) was estimated at around \$30 million. This figure was based on the purchase of up to 10 cars at approximately \$2.2 million each, and 4-5 locomotives at \$1.5-\$2.0 million each. The \$2.2 million figure per car was based on recent comparable purchase prices for passenger cars from other commuter rail service providers. The locomotive pricing was based on the acquisition of rebuilt locomotives (as opposed to new) and recent sale prices of these vehicles. The contract negotiated with Bombardier for 10 cars came in at approximately \$22 million with an additional \$900,000 option for spare parts. The four engines acquired from Motive Power cost approximately \$9 million with a \$600,000 option for spare parts. An additional engine was ordered as a result of the Sandoval County contribution discussed above, bringing the total cost of all rolling stock to about \$35 million. About \$10 million was set aside for station development, which works out to about \$1.1 million per station. This figure varies from one station to the next, because some are more complicated than others. The \$1.1 million was based on a platform costing in the range of \$500,000.00,

parking about \$300,000 and land acquisition about \$300,000. The bid for the construction of the initial 7 stations came in at about \$16 million which is more than the original estimate. Part of this increase is attributed to value added components of the stations in Sandoval County and the additional resources dedicated by the County for these purposes. The cost of steel concrete and fuel also contributed to higher costs than were estimated as part of the original budget.

Fortunately the cost of track and signal improvements (originally estimated at \$30 million) is closer to \$20 million. This change is due to a reduction in the original estimate of required capital improvements as a result of negotiations with the BNSF.

The remaining \$5 million was designated for a maintenance and inspection facility. Commuter rail equipment must be inspected and maintained on a regular basis. Many of these activities require a covered area, a pit under the tracks so equipment that is on the underside of the engines and cars can be accessed for inspections and maintenance, tools to perform the work and spare parts. The \$5 million figure was based on the cost of the maintenance facility for the Trinity Rail Express commuter service in the Dallas/Fort Worth area. The maintenance facility is currently in the design process, and the land for the facility and yard was acquired as part of the BNSF transaction.

Annual operating costs were originally estimated (in the summer of 2004) to be in the range of \$8 to \$12 million. There was a range in these original estimates because they were formulated without a specific service design in place. The range was established by reviewing other commuter rail annual operating budgets (Trinity Rail and Altamont Commuter Express) and the service provided (trains, and train miles per day) and then developing an estimate based on a lower and higher level of train service. A portion of these costs will not vary based the service provided. Liability insurance, for example, will likely cost in the range of \$1.5 - \$2.0 million per year, irregardless of the number of trains running.

A draft operating budget has been prepared based on the draft train schedule. Annual operating costs from this budget are approximately \$10 million per year. As soon as the schedule is finalized a final operating budget will be prepared.

To cover the capital costs of Phase I the NMDOT programmed \$75 million from the GRIP program. This action was incorporated into the MRCOG Transportation Improvement Program by the MRCOG Metropolitan Transportation Board in June of 2004 and approved in the Statewide Transportation Improvement Program by the New Mexico Transportation Commission in July of 2004. As noted above Sandoval County approved an additional \$10 million for the project. In November of 2005, the NMDOT programmed an additional \$60 million in GRIP funds to cover the purchase of the tracks and rights of way from Belen to Bernalillo. As noted previously the cost of this segment is \$50 million.

To cover Phase I operating costs the NMDOT and the MRCOG evaluated several potential sources. Congestion Mitigation Air Quality (CMAQ) funds, which are

distributed by formula from the Federal Highway Administration to the NMDOT, and a portion further distributed to the MRCOG, were identified as the most viable near term revenue source. The NMDOT has since programmed \$30 million in CMAQ funds to cover the operating expenses for the first three years. The funds were approved by the MRCOG Metropolitan Transportation Board in April 2005 and approved by the New Mexico Transportation Commission in June 2005.

Operating revenues are much more difficult to estimate. Most commuter rail operations recover between 20 and 40 percent of the operating costs through fare box returns and other revenue sources like advertising. The rest is covered by public funds. If the lower end of this range is applied to the \$10 million annual operating cost, the annual subsidy required to fund the service will be in the neighborhood of \$8 million. Operating subsidies for public transportation are often cited by the media and others as a questionable use of public money, yet subsidies are common in most government programs and within government programs particularly in transportation. In fact, one of the stated purposes for public transportation is to provide a lower cost option for users of the system. An operating subsidy is required to provide a lower cost alternative. The MRCOG Traffic Monitoring Program generates estimates of Vehicle Miles of Travel (VMT) for the metropolitan area. In 2004 the average daily VMT was 16,735,195. If the American Automobile Associations 2004 cost per mile of 56 cents is applied to this figure, the daily cost for travel in the Albuquerque area born by drivers is a staggering \$8,702,301. This translates into an annual cost to drivers in this region of \$3.2 billion. In the same year auto drivers and passengers in the Albuquerque region spent 494,487 hours a day in their cars. This works out to 247 hours per capita per year. In other words every man, woman and child in the Albuquerque Metropolitan Area spends on average 10 days out of every year in their car. If an hourly rate of \$5.25 is applied to this figure, the daily loss of productivity, or cost for lost time is \$2,596,056. The annual cost is \$947,560,713. If this figure is added to the previous figure the total exceeds \$4 billion per year, just for travel in the Albuquerque Metropolitan area. Keep in mind that neither of these figures includes the cost of roadway construction and maintenance.

There is also a common belief that capital and maintenance costs for all roadways is covered entirely by gas taxes, when in fact a substantial portion of roadway capital and maintenance costs are covered through municipal and county bond issues based on property taxes. Also much of the gas tax that is generated by this state comes from high volume roads (Urban and Rural Interstates and Urban Principal Arterials). Low volume roads (typically more rural and suburban highways) generate very low returns on gas tax relative to the capital and maintenance costs required to keep these facilities functional. Yet there are rarely arguments about this form of subsidy because there is a general recognition that a functional transportation system cannot be developed if each segment of the system is expected to pay for itself. There is also recognition that despite these kinds of subsidies there are secondary benefits that can't always be measured in direct returns to the governments coffers. Low volume roads are often the only way farmers and ranchers can get product to market, children can get to educational facilities, adults can get to jobs and goods can get to remote

destinations. In fact many of the projects included in the GRIP are for improvements to roadways that fall into this category.

For the years beyond this initial period and to cover operational costs for extending the service to Santa Fe, Regional Transit District (RTD) and state funds are anticipated to be a major source of operating revenue. The MRCOG spearheaded the effort to create an RTD for this region, and after many months of effort the Mid Region RTD was officially constituted at the March 2005 meeting of the New Mexico Transportation Commission. Enabling legislation for the formation of RTD's was passed by the New Mexico State Legislature and signed into law by Governor Bill Richardson in the spring of 2003. A Regional Transit District (RTD) under this legislation is an organization devoted to planning and providing public transportation services on a regional basis. The Legislature created Regional Transit Districts in 2003 to provide a framework for local governments to cooperate on regional transit projects. Two or more municipalities, counties, pueblos, tribes, or other local governments can agree to form a RTD and work together to develop a transit network that meets the needs of the area. RTDs are governed by the communities they serve and plan, finance, and operate transit services that serve an entire region. Regional transit services can include passenger rail, fixed-route bus service, and specialized services for seniors, people with disabilities, Medicaid patients, and Welfare-to-Work participants.

In the regular 2004 session, the legislature voted to give local governments new gross receipts tax authority (up to ½ percent) to fund regional transit districts (RTDs). Revenue from that local-option tax can be used to fund passenger rail and other local transit services provided by RTDs.

As noted previously, capital costs for the extension of service to Santa Fe are now estimated at \$240 million. This is a preliminary cost estimate based on the information generated as part of the Alternatives Analysis. After the environmental and preliminary engineering phases are completed a more accurate cost estimate will be provided. The NMDOT intends to use a total of \$318 million of GRIP funds for the commuter rail project. So far \$125 million of this amount has been used to cover the \$75 million Phase I capital costs and the \$50 million purchase of the line and rights of way for Phase I between Belen and Bernalillo. This leaves a balance of \$193 million for Phase II capital costs. If the capital costs for Phase II come in at the \$240 million estimated in the Alternatives Analysis, an additional \$47 million in funding will be required to complete the project. The NMDOT and the MRCOG are aggressively pursuing federal funds to cover this additional amount and more. Targeted federal resources include \$75 million in FTA Small Starts funding and a minimum of \$25 million in other federal earmarks for the Phase II capital expenses. The new transportation bill SAFETEA-LU which was passed by Congress and signed into law by President Bush in the fall of 2005 includes a \$75 million FTA authorization for the Albuquerque to Santa Fe phase.

To many people the costs associated with this project may seem too high. But all major transportation investments have become very expensive. The BIG I reconstruction ended

up costing almost \$300 million. The reconstruction of the Coors/I-40 Interchange is expected to cost in excess of \$90 million. For the cost of these two interchanges this region can acquire a major transportation service and system that will connect many of the communities up and down the Rio Grande valley. The cost of implementing Commuter Rail service between Belen and Santa Fe now, is remarkably cheap compared to other rail new starts in the west and throughout the country.

Other urban centers in the west have waited too long to implement rail based alternative modes of transportation and are now paying dearly as a result. In November of 2004 voters in the Denver region approved an additional half percent sales tax (over the half percent already on the books for public transportation) to fund two new commuter rail, and three new light rail lines (120 miles of new lines in total). The tax increase will generate about \$4.7 billion over the next 10 years to cover the cost of these lines. This initiative passed with fifty eight percent of the vote. This past November Phoenix voters approved (by the same margin) an additional half percent sales tax to construct and operate a 19 mile long light rail line between Tempe and Downtown Phoenix. This project is estimated to cost \$1.3 billion.

Implementing commuter rail between Albuquerque and Santa Fe has been discussed, studied and debated for over 30 years now. This project provides the State and citizens of New Mexico with the opportunity to implement this system.